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# RESEARCH MEMORANDUM

PRESSURE DISTRIBUTIONS OVER A SERIES OF RELATED AFTERBODY  
SHAPES AS Affected BY A PROPULSIVE JET  
AT TRANSONIC SPEEDS

By Beverly Z. Henry, Jr., and Maurice S. Cahn

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NATIONAL ADVISORY COMMITTEE  
FOR AERONAUTICS

WASHINGTON

January 22, 1957

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## PRESSURE DISTRIBUTIONS OVER A SERIES OF RELATED AFTERBODY

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## SUMMARY

Investigations have been conducted at transonic speeds to determine the effects of a sonic propulsive jet on the aerodynamic characteristics of the body from which it issues. Presented herein are the pressure distributions over the related series of afterbody shapes used in these investigations.

These results indicate that the effects of the jet on body surface pressures will be confined to the rearmost 15 to 20 percent of the length for bodies with fineness ratios of the order of 10. On low-drag shapes, those with large extents of low-angle boattailing and small base sizes, the effect of the jet is to cause an increase in body pressures in the vicinity of the base, while on the blunt shapes the predominate effect was to reduce these local pressures within the range of this investigation. Increases in jet temperature from cold to 1,200° F resulted in local-pressure increases which were negligible on the low-drag shapes but became significant on the blunt shapes. Increasing stream Mach number tended to reduce the extent of body surface influenced by the jet.

## INTRODUCTION

Investigations have been conducted in the Langley 8-foot transonic tunnel to evaluate some of the effects of a sonic propulsive jet on the body from which it issues and to determine the influence of afterbody shape on these jet effects. All results were obtained at an angle of attack of 0° throughout the Mach number range from 0.80 to 1.10 and at each test point jet pressure ratio and temperature were varied. Initial results of the investigations have been reported in references 1 and 2. These papers present the variation with jet pressure ratio of base-pressure coefficient and afterbody-drag coefficient at different values



of stream Mach number and jet temperature for each of the configurations tested.

The results presented herein are the pressure-distribution measurements obtained over the bodies investigated. The pressure measurements are presented in coefficient form and have been tabulated for each afterbody at each test condition. These results are presented with limited analysis in order to expedite their availability to those concerned with afterbody-jet-exit design.

#### SYMBOLS

$C_p$	pressure coefficient, $\frac{p_l - p_\infty}{q_\infty}$
M	Mach number
R	Reynolds number, based on body length
d	diameter
l	length
p	static pressure
$p_t$	total pressure
q	dynamic pressure, $\frac{1}{2}pM^2$
t	total temperature, °F
$\beta$	afterbody boattail angle, deg
$\gamma$	ratio of specific heats

#### Subscripts:

b	base
j	jet
$\infty$	free stream
l	local
max	model maximum

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## APPARATUS AND TESTS

## Wind Tunnel

These investigations were conducted in the Langley 8-foot transonic tunnel which has a dodecagonal, slotted test section that permitted continuous testing up to a Mach number of approximately 1.10 for these models. The tunnel is vented to the atmosphere through an air-exchange tower which permits the exhausting of combustion gases from the model into the stream with no detrimental effects on the characteristics of the stream. Maximum deviation from the indicated free-stream Mach number is  $\pm 0.003$  (ref. 3).

## Models

The models used in these investigations were bodies of revolution, the rear portions of which were removed to provide an exit for the jet. These bodies had fineness ratios from 10.0 to 10.7. A single forebody (see table I) was used throughout and the model design allowed the ready interchange of afterbodies of various geometric shape. The models were mounted in the tunnel by means of two support struts. These support struts, with a chord of 11.25 inches and an NACA 65-010 airfoil section measured parallel to the airstream, were placed so that the leading edge intersected the body at a point 21.7 inches from the nose and were swept back  $45^\circ$ . A sketch of the general arrangement of the model in the tunnel is shown in figure 1.

Presented in table II is the equation utilized to define the external shapes of the afterbodies investigated. Also shown are the design points used to assign values to the equation. The ordinates from which the body shapes were constructed are given in table I. Drawings of the afterbody shapes are shown in figure 2. The models were instrumented with base-pressure orifices and with three rows of static-pressure orifices located at  $0^\circ$ ,  $45^\circ$ , and  $72^\circ$  from the plane of symmetry as shown in figure 1.

## Turbojet Simulator

Contained within the models was a device for the simulation of a turbojet exhaust which burns a mixture of ethylene and air and exhausts the combustion products through a sonic nozzle. Details of the simulator are given in reference 1.

### Tests and Measurements

The models were tested at an angle of attack of  $0^\circ$  throughout the Mach number range from 0.80 to 1.10. At each test Mach number the jet pressure ratio was varied from a no-flow condition to 11 or to the maximum obtainable at jet temperatures of "cold,"  $800^\circ F$ , and  $1,200^\circ F$ . The term "cold" flow is used herein to define the temperature of the air coming from the source, normally  $75^\circ$  to  $80^\circ F$ , and corresponds to a fuel-air ratio of 0. The Reynolds number based on body length varied from  $15.0 \times 10^6$  to  $17.4 \times 10^6$ . (See fig. 3.)

At each test point, body-pressure distributions, base pressures, and free-stream conditions were photographically recorded from multiple-tube manometers. Tunnel total temperature was obtained from a recording potentiometer.

Jet total pressure was obtained from a calibrated probe mounted in the combustion chamber and was referenced to a static-pressure orifice on the tunnel wall for the determination of jet pressure ratio. Jet temperature was obtained from a shielded chromel-alumel thermocouple near the exit station. All values defining the jet condition were photographically recorded by a camera synchronized with that used to record pressure data.

### RESULTS AND DISCUSSION

Presented in table III are the measured values of local-pressure coefficient at each test condition over each afterbody depicted in figure 2. Measured values of base-pressure coefficient for these afterbodies have been published in references 1 and 2. In table IV are presented the pressure distributions over the model forebody obtained in conjunction with afterbodies I and VI. These two configurations were arbitrarily chosen to indicate that large changes in conditions over the afterbody caused no change in the forebody distribution.

In figure 4 are presented the variations in local-pressure coefficient along the  $0^\circ$  meridian of each afterbody for several representative jet pressure ratios. This row has been selected as typical since it may be observed that over the rear portions of the bodies, downstream of the local flow field of the strut, the measurements are generally the same for each row within the experimental accuracy of the data (normally  $\pm 0.005$ ).

In the pressure distributions over afterbody IE it will be seen that a displacement of the local pressures occurs rearward of the extension parting line. Since this displacement did not occur for the no-jet-flow

condition, it may be assumed that the displacement is due to leakage through this juncture. The curves in figure 4(a) have consequently been faired accordingly.

As was noted in reference 2, at a Mach number of 1.10, a disturbance originating at the support-body juncture was reflected from the tunnel wall to strike the models at a point varying from about  $x/l_{\max} = 0.90$  to  $x/l_{\max} = 0.97$  depending on body length (approximately 1 to 4 jet diameters upstream of the base). This reflected disturbance resulted in more positive local pressures and, consequently, in lower drag values. While the absolute values of local-pressure coefficient are incorrect in the region of this disturbance, examination of the drag values indicated no alterations of the jet effects which could be attributed to the disturbance. It will be observed that the effect of this disturbance is more readily apparent on those bodies which have cylindrical shape or which closely approach this shape (see afterbodies X, XII, XIII, and XIV). It is on these bodies, however, that the drag contribution of the boattail is reduced in proportion to the contribution of the body base.

The effect of the jet is confined generally to the rearmost 15 to 20 percent of the body length. For the low-drag shapes, bodies with extensive low-angle boattailing ( $8^\circ$  to  $16^\circ$ ) and small base annulus sizes ( $d_j/d_b \approx 0.5$  or larger), external expansion of the jet at pressure ratios of about 3 and higher resulted in an outward deflection of the external stream which caused an increase in pressure over the rear portion of the bodies with the accompanying drag reduction (see, for example, afterbodies I and XI). For the blunt shapes, bodies with lesser extent of boattailing and large base sizes ( $d_j/d_b < 0.5$ ), the action of the jet was to aspirate the low-energy regions at the rear of these bodies to lower pressures with a resulting increase in drag (see, for example, afterbodies X, XII, and XIII). This unfavorable effect existed with large-based models even though the boattail angle was of a favorable magnitude and increased with increasing jet pressure ratio until the point was reached where the jet deflected the external stream in a favorable manner. The pressure ratio at which the jet interacts with the external stream is dependent on the size of the base annulus, being about 3 for small-based models similar to afterbody I and above the maximum obtainable during this investigation for a cylindrical shape such as afterbody X.

The effect of increasing jet temperature was generally to cause a pressure increase in the region of the body base. For the low-drag shapes, this effect was so small as to be considered negligible. For the blunt shapes, however, the effects of changes in temperature became significant.

Reference 2 indicated that no major variation in the character of the jet effects on drag resulted due to changes in stream Mach number within the range of this investigation. The pressure distributions evidence a trend towards a lesser extent of the body surface being affected as the Mach number was increased.

#### CONCLUDING REMARKS

From pressure-distribution measurements made over the surfaces of a related series of afterbodies as influenced by a propulsive jet, the following observations are made:

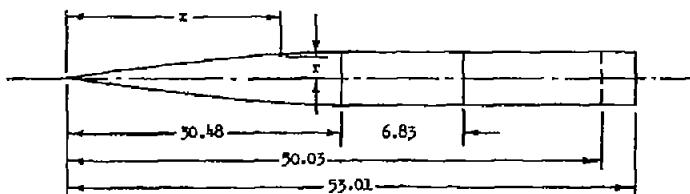
1. The effect of the jet on local body-surface pressures was confined generally to the rearmost 15 to 20 percent of the length for bodies with fineness ratios of the order of 10.
2. For bodies with large extents of low-angle boattailing and small base sizes, the effect of the jet was to increase the local pressure in the vicinity of the base.
3. For bodies with lesser extents of boattailing and large base sizes, the predominate effect of the jet within the range of this investigation was to reduce the local pressures in the vicinity of the base.
4. Increasing jet temperature from cold to  $1,200^{\circ}$  F resulted in a local-pressure increase which was negligible for the low-drag shapes but which became significant for the more blunt shapes.
5. Increases in stream Mach number tended to reduce the extent of body surface influenced by the jet.

Langley Aeronautical Laboratory,  
National Advisory Committee for Aeronautics,  
Langley Field, Va., October 19, 1956.

## REFERENCES

1. Henry, Beverly Z., Jr., and Cahn, Maurice S.: Preliminary Results of an Investigation at Transonic Speeds To Determine the Effects of a Heated Propulsive Jet on the Drag Characteristics of a Related Series of Afterbodies. NACA RM L55A24a, 1955.
2. Henry, Beverly Z., Jr., and Cahn, Maurice S.: Additional Results of an Investigation at Transonic Speeds To Determine the Effects of a Heated Propulsive Jet on the Drag Characteristics of a Series of Related Afterbodies. NACA RM L56G12, 1956.
3. Ritchie, Virgil S., and Pearson, Albin O.: Calibration of the Slotted Test Section of the Langley 8-Foot Transonic Tunnel and Preliminary Experimental Investigation of Boundary-Reflected Disturbances. NACA RM L51K14, 1952.

TABLE I.- BODY ORDINATES



## Forebody Ordinates

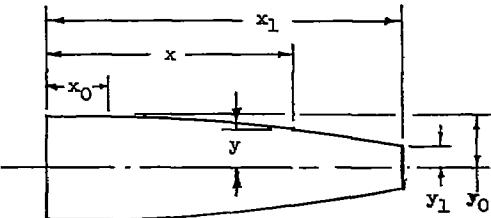
Station, x, in.	Radius, r, in.	Station, x, in.	Radius, r, in.
0.50	0.159	12.00	1.854
.45	.179	15.00	2.079
.75	.257	18.00	2.245
1.50	.455	21.00	2.360
3.00	.725	24.00	2.438
4.50	.968	27.00	2.486
6.00	1.183	30.00	2.500
9.00	1.356	30.48	2.500

## Afterbody Ordinates

Station, x, in.	Radius, r, in.													
	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV
30.48	2.500	2.500	2.500	2.500	2.500	2.500	2.500	2.500	2.500	2.500	2.500	2.500	2.500	2.500
33.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—
36.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—
37.51	2.500	2.500	2.500	2.500	2.500	2.500	2.500	2.500	—	—	—	—	—	—
39.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—
40.12	2.500	2.500	—	2.499	2.500	—	2.500	—	2.505	—	—	—	—	—
42.12	2.469	2.499	—	2.446	2.488	2.500	2.492	2.500	—	2.500	2.500	2.500	2.500	2.500
44.12	2.364	2.458	2.500	2.295	2.414	2.498	2.419	2.484	—	2.030	—	—	—	—
45.12	—	—	—	—	—	—	—	—	1.877	—	—	—	—	—
46.12	2.176	2.350	2.496	2.031	2.211	2.469	2.260	2.384	—	1.774	2.500	2.500	2.500	2.500
48.12	1.902	2.150	2.459	1.694	1.814	2.295	2.006	2.175	1.916	—	1.906	2.432	2.499	—
50.05	—	—	—	1.182	1.182	1.182	—	—	1.257	—	—	—	—	2.500
50.12	1.534	1.758	2.268	—	—	—	1.654	1.894	—	—	1.235	2.234	2.398	—
51.12	1.315	1.490	2.013	—	—	—	1.440	1.650	—	—	1.098	2.043	2.299	—
52.12	1.073	1.172	1.385	—	—	—	1.201	1.416	—	—	.950	1.883	2.067	—
53.01	.856	.856	.856	—	—	—	.965	1.182	—	2.500	.836	1.600	1.883	—

TABLE II.- AFTERBODY DESIGN

Equation:

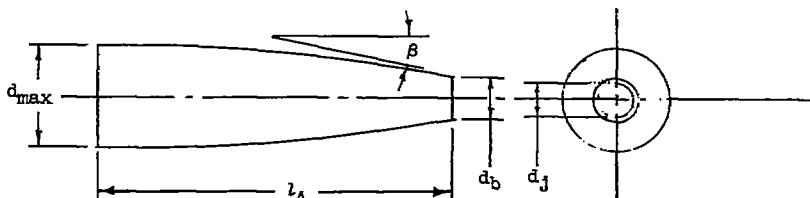


$$y = y_0 - (y_0 - y_1) \left( \frac{x - x_0}{x_1 - x_0} \right)^{\frac{(x_1 - x_0)}{(y_0 - y_1)} \tan \beta}$$

where:

 $x$  = any afterbody station $y_1$  = body base radius $x_1$  = body base station $y_0$  = maximum body radius $x_0$  = body tangency point $\beta$  = boattail angle $y$  = radius at station  $x$  $\frac{x_1 - x_0}{y_0 - y_1}$  = Constant = 7.747

Design points:



Afterbody	$d_{\max}$ , in.	$l_A$ , in.	$\beta$ , deg	$d_j$ , in.	$d_b$ , in.	$\frac{d_j}{d_b}$	$\frac{d_j}{d_{\max}}$	$x_0$ , in.
IR	5.0	16.40	16	1.240	1.240	1.000	0.248	2.81
I	5.0	15.70	16	1.240	1.672	.742	.248	2.81
II	5.0	15.70	24	1.240	1.672	.742	.248	2.81
III	5.0	15.70	45	1.240	1.672	.742	.248	2.81
IV	5.0	12.72	16	1.754	2.364	.742	.351	2.51
V	5.0	12.72	24	1.754	2.364	.742	.351	2.51
VI	5.0	12.72	45	1.754	2.364	.742	.351	2.51
VII	5.0	15.70	16	1.240	1.930	.643	.248	3.81
VIII	5.0	15.70	16	1.240	2.364	.525	.248	5.49
IX	5.0	19.55	7.7	1.754	2.513	.698	.351	Not defined by this equation
X	5.0	15.70	0	1.240	5.000	.248	.248	
XI	5.0	15.70	8	1.240	1.672	.742	.248	2.81
XII	5.0	15.70	16	1.240	3.200	.388	.248	8.73
XIII	5.0	15.70	16	1.240	3.690	.336	.248	10.63
XIV	5.0	12.72	0	1.754	5.000	.351	.351	12.72

TABLE III.- APPENDAGE PRESSURE COEFFICIENTS

(a) Afterbody IE

 $t_j = \text{Cold}$ 

$\frac{x}{d_J}$	$\frac{x}{t_{\max}}$	Pressure coefficients for -													
		$M_\infty = 0.80$			$M_\infty = 0.90$			$M_\infty = 1.00$			$M_\infty = 1.10$				
		$\theta = 0^\circ$	$\theta = 45^\circ$	$\theta = 72^\circ$	$\theta = 0^\circ$	$\theta = 45^\circ$	$\theta = 72^\circ$	$\theta = 0^\circ$	$\theta = 45^\circ$	$\theta = 72^\circ$	$\theta = 0^\circ$	$\theta = 45^\circ$	$\theta = 72^\circ$		
		$P_{t,j}/P_m = 1.07$				$P_{t,j}/P_m = 1.00$				$P_{t,j}/P_m = 1.09$					
12.56	.720	-0.041	-0.031	-0.025	-0.036	-0.028	-0.019	-0.101	-0.093	-0.085	-0.088	-0.072	-0.067	-0.063	
10.96	.747	-0.078	-0.070	-0.068	-0.075	-0.071	-0.071	-0.109	-0.107	-0.102	-0.102	-0.095	-0.091	-0.087	
9.36	.764	-0.122	-0.117	-0.112	-0.121	-0.118	-0.122	-0.176	-0.174	-0.168	-0.168	-0.159	-0.151	-0.147	
7.72	.821	-0.163	-0.153	-0.145	-0.165	-0.153	-0.153	-0.208	-0.204	-0.198	-0.198	-0.189	-0.181	-0.175	
6.11	.882	-0.203	-0.193	-0.185	-0.205	-0.193	-0.193	-0.243	-0.240	-0.235	-0.235	-0.226	-0.218	-0.213	
4.50	.886	-0.243	-0.233	-0.225	-0.248	-0.235	-0.235	-0.286	-0.283	-0.278	-0.278	-0.269	-0.261	-0.256	
2.90	.933	-0.283	-0.273	-0.265	-0.293	-0.281	-0.281	-0.337	-0.334	-0.328	-0.328	-0.319	-0.311	-0.305	
2.08	.932	-0.323	-0.313	-0.305	-0.333	-0.321	-0.321	-0.377	-0.374	-0.368	-0.368	-0.359	-0.351	-0.345	
1.30	.970	-0.363	-0.353	-0.345	-0.373	-0.361	-0.361	-0.420	-0.417	-0.411	-0.411	-0.402	-0.394	-0.388	
.87	.980	-0.403	-0.393	-0.385	-0.413	-0.401	-0.401	-0.471	-0.468	-0.462	-0.462	-0.453	-0.445	-0.439	
.59	.992	-0.443	-0.433	-0.425	-0.453	-0.441	-0.441	-0.511	-0.508	-0.502	-0.502	-0.493	-0.485	-0.479	
.39	.993	-0.483	-0.473	-0.465	-0.493	-0.481	-0.481	-0.561	-0.558	-0.552	-0.552	-0.543	-0.535	-0.529	
.17	.996	-0.523	-0.513	-0.505	-0.533	-0.521	-0.521	-0.591	-0.588	-0.582	-0.582	-0.573	-0.565	-0.559	
		$P_{t,j}/P_m = 1.87$				$P_{t,j}/P_m = 1.90$				$P_{t,j}/P_m = 2.01$				$P_{t,j}/P_m = 1.98$	
12.56	.720	-0.038	-0.031	-0.025	-0.035	-0.028	-0.019	-0.101	-0.097	-0.089	-0.088	-0.084	-0.079	-0.075	-0.073
10.96	.747	-0.075	-0.068	-0.063	-0.080	-0.074	-0.071	-0.111	-0.107	-0.102	-0.102	-0.098	-0.094	-0.091	-0.089
9.36	.764	-0.117	-0.112	-0.110	-0.121	-0.116	-0.120	-0.180	-0.177	-0.170	-0.170	-0.167	-0.163	-0.159	-0.156
7.72	.821	-0.157	-0.150	-0.148	-0.167	-0.154	-0.157	-0.210	-0.207	-0.202	-0.202	-0.197	-0.193	-0.189	-0.186
6.11	.882	-0.197	-0.190	-0.188	-0.207	-0.194	-0.194	-0.267	-0.264	-0.259	-0.259	-0.250	-0.246	-0.242	-0.239
4.50	.886	-0.237	-0.230	-0.228	-0.247	-0.235	-0.235	-0.307	-0.304	-0.300	-0.300	-0.291	-0.287	-0.283	-0.279
2.90	.933	-0.277	-0.267	-0.265	-0.297	-0.285	-0.285	-0.357	-0.354	-0.349	-0.349	-0.340	-0.336	-0.332	-0.328
2.08	.932	-0.317	-0.307	-0.305	-0.337	-0.325	-0.325	-0.395	-0.392	-0.387	-0.387	-0.378	-0.374	-0.370	-0.366
1.30	.970	-0.357	-0.347	-0.345	-0.375	-0.363	-0.363	-0.435	-0.432	-0.427	-0.427	-0.418	-0.414	-0.410	-0.406
.87	.980	-0.407	-0.397	-0.395	-0.435	-0.423	-0.423	-0.495	-0.492	-0.487	-0.487	-0.478	-0.474	-0.470	-0.466
.59	.992	-0.447	-0.437	-0.435	-0.475	-0.463	-0.463	-0.535	-0.532	-0.527	-0.527	-0.518	-0.514	-0.510	-0.506
.39	.993	-0.487	-0.477	-0.475	-0.515	-0.503	-0.503	-0.575	-0.572	-0.567	-0.567	-0.558	-0.554	-0.550	-0.546
.17	.996	-0.527	-0.517	-0.515	-0.555	-0.543	-0.543	-0.623	-0.620	-0.615	-0.615	-0.606	-0.602	-0.598	-0.594
		$P_{t,j}/P_m = 2.98$				$P_{t,j}/P_m = 2.95$				$P_{t,j}/P_m = 3.00$				$P_{t,j}/P_m = 2.98$	
12.56	.720	-0.041	-0.031	-0.025	-0.037	-0.028	-0.019	-0.101	-0.095	-0.085	-0.088	-0.084	-0.079	-0.075	-0.073
10.96	.747	-0.078	-0.070	-0.068	-0.082	-0.075	-0.071	-0.108	-0.105	-0.101	-0.105	-0.101	-0.097	-0.093	-0.091
9.36	.764	-0.122	-0.117	-0.115	-0.131	-0.121	-0.122	-0.178	-0.175	-0.170	-0.175	-0.169	-0.165	-0.161	-0.158
7.72	.821	-0.162	-0.155	-0.153	-0.174	-0.161	-0.161	-0.220	-0.217	-0.212	-0.217	-0.207	-0.203	-0.200	-0.197
6.11	.882	-0.202	-0.192	-0.188	-0.222	-0.210	-0.210	-0.277	-0.274	-0.269	-0.277	-0.267	-0.263	-0.259	-0.255
4.50	.886	-0.242	-0.232	-0.228	-0.262	-0.250	-0.250	-0.322	-0.319	-0.314	-0.322	-0.312	-0.308	-0.304	-0.300
2.90	.933	-0.282	-0.272	-0.265	-0.302	-0.290	-0.290	-0.362	-0.359	-0.354	-0.362	-0.352	-0.348	-0.344	-0.340
2.08	.932	-0.322	-0.312	-0.305	-0.342	-0.330	-0.330	-0.392	-0.389	-0.384	-0.392	-0.382	-0.378	-0.374	-0.370
1.30	.970	-0.362	-0.352	-0.345	-0.382	-0.370	-0.370	-0.432	-0.429	-0.424	-0.432	-0.422	-0.418	-0.414	-0.410
.87	.980	-0.402	-0.392	-0.385	-0.422	-0.410	-0.410	-0.472	-0.469	-0.464	-0.472	-0.462	-0.458	-0.454	-0.450
.59	.992	-0.442	-0.432	-0.425	-0.462	-0.450	-0.450	-0.512	-0.509	-0.504	-0.512	-0.502	-0.498	-0.494	-0.490
.39	.993	-0.482	-0.472	-0.465	-0.502	-0.490	-0.490	-0.552	-0.549	-0.544	-0.552	-0.542	-0.538	-0.534	-0.530
.17	.996	-0.522	-0.512	-0.505	-0.542	-0.530	-0.530	-0.590	-0.587	-0.582	-0.590	-0.580	-0.576	-0.572	-0.568
		$P_{t,j}/P_m = 3.01$				$P_{t,j}/P_m = 3.94$				$P_{t,j}/P_m = 5.04$				$P_{t,j}/P_m = 4.96$	
12.56	.720	-0.038	-0.028	-0.022	-0.037	-0.028	-0.017	-0.105	-0.097	-0.089	-0.086	-0.082	-0.078	-0.074	-0.073
10.96	.747	-0.075	-0.068	-0.063	-0.080	-0.074	-0.071	-0.110	-0.105	-0.102	-0.102	-0.100	-0.096	-0.093	-0.091
9.36	.764	-0.117	-0.112	-0.107	-0.121	-0.116	-0.115	-0.178	-0.175	-0.172	-0.172	-0.169	-0.165	-0.162	-0.158
7.72	.821	-0.157	-0.150	-0.148	-0.167	-0.154	-0.154	-0.210	-0.207	-0.202	-0.202	-0.198	-0.194	-0.191	-0.187
6.11	.882	-0.197	-0.190	-0.188	-0.217	-0.205	-0.205	-0.277	-0.274	-0.269	-0.277	-0.267	-0.263	-0.259	-0.255
4.50	.886	-0.237	-0.230	-0.225	-0.265	-0.253	-0.253	-0.322	-0.319	-0.314	-0.322	-0.312	-0.308	-0.304	-0.300
2.90	.933	-0.277	-0.267	-0.265	-0.307	-0.295	-0.295	-0.362	-0.359	-0.354	-0.362	-0.352	-0.348	-0.344	-0.340
2.08	.932	-0.317	-0.307	-0.305	-0.347	-0.335	-0.335	-0.392	-0.389	-0.384	-0.392	-0.382	-0.378	-0.374	-0.370
1.30	.970	-0.357	-0.347	-0.345	-0.387	-0.375	-0.375	-0.432	-0.429	-0.424	-0.432	-0.422	-0.418	-0.414	-0.410
.87	.980	-0.407	-0.397	-0.395	-0.437	-0.425	-0.425	-0.492	-0.489	-0.484	-0.492	-0.482	-0.478	-0.474	-0.470
.59	.992	-0.447	-0.437	-0.435	-0.477	-0.465	-0.465	-0.532	-0.529	-0.524	-0.532	-0.522	-0.518	-0.514	-0.510
.39	.993	-0.487	-0.477	-0.475	-0.517	-0.505	-0.505	-0.572	-0.569	-0.564	-0.572	-0.562	-0.558	-0.554	-0.550
.17	.996	-0.527	-0.517	-0.515	-0.555	-0.543	-0.543	-0.612	-0.609	-0.604	-0.612	-0.602	-0.598	-0.594	-0.590
		$P_{t,j}/P_m = 6.97$				$P_{t,j}/P_m = 7.01$									
12.56	.720							-0.103	-0.097	-0.089	-0.086	-0.089	-0.085	-0.084	-0.083
10.96	.747							-0.110	-0.105	-0.102	-0.102	-0.105	-0.102	-0.101	-0.100
9.36	.764							-0.117	-0.113	-0.110	-0.110	-0.113	-0.110	-0.109	-0.108
7.72	.821							-0.125	-0.120	-0.117	-0.117	-0.120	-0.117	-0.116	-0.115
6.11	.882							-0.133	-0.128	-0.125	-0.125	-0.128	-0.125	-0.124	-0.123
4.50	.886							-0.179	-0.165	-0.162	-0.162	-0.165	-0.162	-0.161	-0.160
2.90	.933							-0.185	-0.182	-0.181	-0.181	-0.185	-0.182	-0.181	-0.180</td

TABLE III.- AFTERBODY PRESSURE COEFFICIENTS - Continued

(a) Afterbody IR - Concluded

$t_2 = 1,200^{\circ} F$

$\frac{x}{x_2}$	$\frac{x}{L_{max}}$	Pressure coefficients for -											
		M <sub>a</sub> = 0.80			M <sub>a</sub> = 0.90			M <sub>a</sub> = 1.00			M <sub>a</sub> = 1.10		
		$\theta = 0^{\circ}$	$\theta = 45^{\circ}$	$\theta = 72^{\circ}$	$\theta = 0^{\circ}$	$\theta = 45^{\circ}$	$\theta = 72^{\circ}$	$\theta = 0^{\circ}$	$\theta = 45^{\circ}$	$\theta = 72^{\circ}$	$\theta = 0^{\circ}$	$\theta = 45^{\circ}$	$\theta = 72^{\circ}$
		P <sub>t,x</sub> /P <sub>a</sub> = 2.00	P <sub>t,x</sub> /P <sub>a</sub> = 2.03	P <sub>t,x</sub> /P <sub>a</sub> = 1.97	P <sub>t,x</sub> /P <sub>a</sub> = 1.96								
12.56	.710	-0.038	-0.031	-0.031	-0.037	-0.036	-0.037	-0.107	-0.102	-0.093	-0.054	-0.037	-0.061
10.96	.747	-0.068	-0.068	-0.066	-0.060	-0.076	-0.071	-0.115	-0.109	-0.107	-0.074	-0.063	-0.062
9.36	.784	-0.117	-0.115	-0.110	-0.114	-0.134	-0.130	-0.182	-0.176	-0.176	-0.133	-0.131	-0.130
7.75	.821	-0.127	-0.122	-0.122	-0.131	-0.143	-0.145	-0.202	-0.194	-0.196	-0.147	-0.149	-0.150
6.11	.859	-0.093	-0.093	-0.090	-0.104	-0.102	-0.104	-0.176	-0.172	-0.174	-0.127	-0.122	-0.125
4.50	.896	-0.035	-0.035	-0.035	-0.039	-0.039	-0.041	-0.134	-0.132	-0.132	-0.084	-0.082	-0.083
2.90	.933	.023	.023	.021	.045	.043	.059	.119	.117	.115	.053	.053	.056
2.08	.952	.085	.082	.080	.097	.093	.093	.167	.167	.167	.087	.087	.086
1.30	.970	.139	.136	.135	.158	.151	.151	.200	.200	.203	.141	.141	.142
.87	.980	.167	.164	.165	.186	.177	.186	.212	.212	.213	.157	.157	.158
.78	.985	.175	.176	.176	.186	.186	.190	.215	.215	.215	.167	.167	.166
.59	.991	.193	.193	.193	.206	.210	.213	.234	.234	.234	.174	.174	.175
.17	.996	.206	.210	.213	.213	.223	.223	.230	.230	.230	.179	.179	.179
		P <sub>t,x</sub> /P <sub>a</sub> = 3.01	P <sub>t,x</sub> /P <sub>a</sub> = 3.01	P <sub>t,x</sub> /P <sub>a</sub> = 3.02	P <sub>t,x</sub> /P <sub>a</sub> = 3.02								
12.56	.710	-0.038	-0.031	-0.021	-0.037	-0.028	-0.019	-0.109	-0.099	-0.093	-0.054	-0.039	-0.046
10.96	.747	-0.068	-0.068	-0.063	-0.062	-0.076	-0.071	-0.110	-0.105	-0.105	-0.074	-0.063	-0.063
9.36	.784	-0.117	-0.118	-0.107	-0.111	-0.134	-0.137	-0.181	-0.175	-0.175	-0.137	-0.139	-0.139
7.75	.821	-0.125	-0.120	-0.120	-0.134	-0.137	-0.147	-0.202	-0.196	-0.196	-0.147	-0.149	-0.149
6.11	.859	-0.090	-0.090	-0.088	-0.106	-0.104	-0.104	-0.176	-0.170	-0.172	-0.127	-0.122	-0.123
4.50	.896	-0.036	-0.036	-0.036	-0.039	-0.039	-0.041	-0.118	-0.122	-0.122	-0.084	-0.084	-0.085
2.90	.933	.028	.028	.028	.045	.043	.059	.124	.122	.122	.067	.067	.068
2.08	.952	.087	.083	.082	.097	.097	.097	.169	.171	.171	.137	.137	.137
1.30	.970	.141	.141	.141	.152	.151	.151	.203	.203	.203	.141	.141	.142
.87	.980	.165	.165	.165	.186	.186	.193	.216	.216	.216	.157	.157	.157
.78	.985	.173	.173	.173	.186	.186	.193	.214	.214	.214	.157	.157	.157
.59	.991	.185	.185	.185	.200	.200	.206	.224	.224	.224	.166	.166	.166
.17	.996	.198	.198	.198	.210	.210	.212	.230	.230	.230	.172	.172	.172
		P <sub>t,x</sub> /P <sub>a</sub> = 4.98	P <sub>t,x</sub> /P <sub>a</sub> = 4.96	P <sub>t,x</sub> /P <sub>a</sub> = 5.02	P <sub>t,x</sub> /P <sub>a</sub> = 5.00								
12.56	.710	-0.058	-0.051	-0.021	-0.057	-0.028	-0.019	-0.107	-0.101	-0.091	-0.055	-0.030	-0.044
10.96	.747	-0.088	-0.088	-0.063	-0.060	-0.076	-0.071	-0.115	-0.109	-0.107	-0.076	-0.065	-0.065
9.36	.784	-0.117	-0.118	-0.107	-0.111	-0.134	-0.137	-0.181	-0.176	-0.176	-0.138	-0.139	-0.139
7.75	.821	-0.125	-0.120	-0.120	-0.134	-0.137	-0.147	-0.202	-0.196	-0.196	-0.147	-0.149	-0.149
6.11	.859	-0.087	-0.087	-0.087	-0.106	-0.104	-0.104	-0.176	-0.170	-0.172	-0.127	-0.122	-0.123
4.50	.896	-0.036	-0.036	-0.036	-0.039	-0.039	-0.041	-0.118	-0.122	-0.122	-0.084	-0.084	-0.085
2.90	.933	.028	.028	.028	.045	.043	.059	.124	.122	.122	.067	.067	.068
2.08	.952	.087	.083	.082	.097	.097	.097	.169	.171	.171	.137	.137	.137
1.30	.970	.141	.141	.141	.152	.151	.151	.203	.203	.203	.141	.141	.142
.87	.980	.165	.165	.165	.186	.186	.193	.216	.216	.216	.157	.157	.157
.78	.985	.173	.173	.173	.186	.186	.193	.214	.214	.214	.157	.157	.157
.59	.991	.185	.185	.185	.200	.200	.206	.224	.224	.224	.166	.166	.166
.17	.996	.198	.198	.198	.210	.210	.212	.230	.230	.230	.172	.172	.172
		P <sub>t,x</sub> /P <sub>a</sub> = 6.97	P <sub>t,x</sub> /P <sub>a</sub> = 7.00	P <sub>t,x</sub> /P <sub>a</sub> = 7.00	P <sub>t,x</sub> /P <sub>a</sub> = 6.99								
12.56	.710	-0.058	-0.051	-0.021	-0.057	-0.028	-0.019	-0.107	-0.101	-0.091	-0.057	-0.030	-0.044
10.96	.747	-0.088	-0.088	-0.063	-0.060	-0.076	-0.071	-0.115	-0.109	-0.107	-0.076	-0.065	-0.065
9.36	.784	-0.117	-0.118	-0.107	-0.111	-0.134	-0.137	-0.181	-0.176	-0.176	-0.138	-0.139	-0.139
7.75	.821	-0.125	-0.120	-0.120	-0.134	-0.137	-0.147	-0.202	-0.196	-0.196	-0.147	-0.149	-0.149
6.11	.859	-0.087	-0.087	-0.087	-0.106	-0.104	-0.104	-0.176	-0.170	-0.172	-0.127	-0.122	-0.123
4.50	.896	-0.036	-0.036	-0.036	-0.039	-0.039	-0.041	-0.118	-0.122	-0.122	-0.084	-0.084	-0.085
2.90	.933	.028	.028	.028	.045	.043	.059	.124	.122	.122	.067	.067	.068
2.08	.952	.087	.083	.082	.097	.097	.097	.169	.171	.171	.137	.137	.137
1.30	.970	.141	.141	.141	.152	.151	.151	.203	.203	.203	.141	.141	.142
.87	.980	.165	.165	.165	.186	.186	.193	.216	.216	.216	.157	.157	.157
.78	.985	.173	.173	.173	.186	.186	.193	.214	.214	.214	.157	.157	.157
.59	.991	.185	.185	.185	.200	.200	.206	.224	.224	.224	.166	.166	.166
.17	.996	.198	.198	.198	.210	.210	.212	.230	.230	.230	.172	.172	.172
		P <sub>t,x</sub> /P <sub>a</sub> = 8.96	P <sub>t,x</sub> /P <sub>a</sub> = 9.01	P <sub>t,x</sub> /P <sub>a</sub> = 9.00	P <sub>t,x</sub> /P <sub>a</sub> = 8.99								
12.56	.710	-0.050	-0.053	-0.025	-0.057	-0.028	-0.019	-0.109	-0.101	-0.091	-0.059	-0.031	-0.046
10.96	.747	-0.080	-0.067	-0.060	-0.074	-0.071	-0.071	-0.113	-0.109	-0.107	-0.073	-0.065	-0.065
9.36	.784	-0.117	-0.118	-0.107	-0.111	-0.134	-0.137	-0.181	-0.176	-0.176	-0.138	-0.139	-0.139
7.75	.821	-0.125	-0.120	-0.120	-0.134	-0.137	-0.147	-0.202	-0.196	-0.196	-0.147	-0.149	-0.149
6.11	.859	-0.087	-0.087	-0.087	-0.106	-0.104	-0.104	-0.176	-0.170	-0.172	-0.127	-0.122	-0.123
4.50	.896	-0.036	-0.036	-0.036	-0.039	-0.039	-0.041	-0.118	-0.122	-0.122	-0.084	-0.084	-0.085
2.90	.933	.028	.028	.028	.045	.043	.059	.124	.122	.122	.067	.067	.068
2.08	.952	.087	.083	.082	.097	.097	.097	.169	.171	.171	.137	.137	.137
1.30	.970	.141	.141	.141	.152	.151	.151	.203	.203	.203	.141	.141	.142
.87	.980	.165	.165	.165	.186	.186	.193	.216	.216	.216	.157	.157	.157
.78	.985	.173	.173	.173	.186	.186	.193	.214	.214	.214	.157	.157	.157
.59	.991	.185	.185	.185	.200	.200	.206	.224	.224	.224	.166	.166	.166
.17	.996	.198	.198	.198	.210	.210	.212	.230	.230	.230	.172	.172	.172
		P <sub>t,x</sub> /P <sub>a</sub> = 10.99			P <sub>t,x</sub> /P <sub>a</sub> = 10.97								
12.56	.710							-0.109	-0.099	-0.091	-0.059	-0.033	-0.046
10.96	.747							-0.111	-0.107	-0.101	-0.071	-0.035	-0.046
9.36	.784							-0.120	-0.116	-0.109	-0.076	-0.033	-0.046
7.75	.821							-0.120	-0.116	-0.109	-0.076	-0.033	-0.046
6.11	.859							-0.120	-0.116	-0.109	-0.076	-0.033	-0.046
4.50	.896							-0.120	-0.116	-0.109	-0.076	-0.033	-0.046
2.90	.933							-0.120	-0.116	-0.109	-0.076	-0.033	-0.046
2.08	.952							-0.120	-0.116	-0.109	-0.076	-0.033	-0.046
1.30	.970							-0.120	-0.116	-0.109	-0.076	-0.033	-0.046
.87	.980							-0.120	-0.116	-0.109	-0.076	-0.033	-0.046
.78	.985							-0.120	-0.116	-0.109	-0.076	-0.033	-0.046
.59	.991							-0.120</td					

TABLE III.- AFTERBODY PRESSURE COEFFICIENTS - Continued

(b) Afterbody I

**t<sub>1</sub>** = Cold

CONFIDENTIAL

TABLE III.--AFTERSHOCK PRESSURE COEFFICIENTS - Continued

(b) Afterbody I - Continued

 $T_3 = 800^\circ F$ 

$\frac{x}{d_1}$	$\frac{x}{l_{max}}$	Pressure coefficients for -											
		M <sub>a</sub> = 0.80			M <sub>a</sub> = 0.90			M <sub>a</sub> = 1.00			M <sub>a</sub> = 1.10		
		s = 0°	s = 45°	s = 72°	s = 0°	s = 45°	s = 72°	s = 0°	s = 45°	s = 72°	s = 0°	s = 45°	s = 72°
		$P_{t,x}/P_m = 2.00$			$P_{t,x}/P_m = 1.96$			$P_{t,x}/P_m = 1.96$			$P_{t,x}/P_m = 1.96$		
12.01	0.719	-0.059	-0.030	-0.019	-0.059	-0.029	-0.018	-0.107	-0.095	-0.084	-0.097	-0.077	-0.054
8.79	.727	-0.072	-0.040	-0.020	-0.072	-0.041	-0.020	-0.125	-0.103	-0.083	-0.124	-0.094	-0.074
7.18	.737	-0.074	-0.042	-0.021	-0.074	-0.043	-0.021	-0.127	-0.105	-0.085	-0.126	-0.096	-0.076
5.76	.752	-0.076	-0.044	-0.023	-0.076	-0.045	-0.023	-0.129	-0.107	-0.087	-0.128	-0.098	-0.078
4.35	.768	-0.078	-0.046	-0.025	-0.078	-0.047	-0.025	-0.131	-0.109	-0.089	-0.130	-0.100	-0.080
3.35	.785	-0.080	-0.048	-0.027	-0.080	-0.049	-0.027	-0.133	-0.111	-0.091	-0.132	-0.102	-0.082
2.35	.802	-0.082	-0.050	-0.029	-0.082	-0.051	-0.029	-0.135	-0.113	-0.093	-0.134	-0.104	-0.084
1.34	.819	-0.084	-0.052	-0.031	-0.084	-0.053	-0.031	-0.137	-0.115	-0.095	-0.136	-0.106	-0.086
.73	.835	-0.085	-0.053	-0.032	-0.085	-0.054	-0.032	-0.138	-0.116	-0.096	-0.137	-0.107	-0.087
.39	.852	-0.086	-0.054	-0.033	-0.086	-0.055	-0.033	-0.139	-0.117	-0.097	-0.138	-0.108	-0.088
.17	.906	-0.087	-0.055	-0.034	-0.087	-0.056	-0.034	-0.140	-0.118	-0.098	-0.139	-0.109	-0.089
		$P_{t,x}/P_m = 2.97$			$P_{t,x}/P_m = 3.00$			$P_{t,x}/P_m = 2.99$			$P_{t,x}/P_m = 2.99$		
12.01	.719	-0.040	-0.029	-0.020	-0.047	-0.037	-0.024	-0.107	-0.094	-0.084	-0.097	-0.076	-0.053
10.39	.737	-0.073	-0.051	-0.031	-0.076	-0.052	-0.030	-0.112	-0.110	-0.108	-0.121	-0.099	-0.079
8.76	.752	-0.075	-0.053	-0.033	-0.078	-0.054	-0.032	-0.114	-0.112	-0.110	-0.123	-0.101	-0.081
7.18	.768	-0.077	-0.055	-0.035	-0.080	-0.056	-0.034	-0.116	-0.114	-0.112	-0.125	-0.103	-0.083
5.76	.785	-0.078	-0.056	-0.036	-0.081	-0.057	-0.035	-0.117	-0.115	-0.113	-0.126	-0.104	-0.084
4.35	.802	-0.079	-0.057	-0.037	-0.082	-0.058	-0.036	-0.118	-0.116	-0.114	-0.127	-0.105	-0.085
3.35	.819	-0.080	-0.058	-0.038	-0.083	-0.059	-0.037	-0.119	-0.117	-0.115	-0.128	-0.106	-0.086
2.35	.835	-0.081	-0.059	-0.039	-0.084	-0.060	-0.038	-0.120	-0.118	-0.116	-0.129	-0.107	-0.087
1.34	.852	-0.082	-0.060	-0.040	-0.085	-0.061	-0.039	-0.121	-0.119	-0.117	-0.130	-0.108	-0.088
.73	.868	-0.083	-0.061	-0.041	-0.086	-0.062	-0.040	-0.122	-0.120	-0.118	-0.131	-0.109	-0.089
.39	.885	-0.084	-0.062	-0.042	-0.087	-0.063	-0.041	-0.123	-0.121	-0.119	-0.132	-0.110	-0.089
.17	.906	-0.085	-0.063	-0.043	-0.088	-0.064	-0.042	-0.124	-0.122	-0.120	-0.133	-0.111	-0.090
		$P_{t,x}/P_m = 5.00$			$P_{t,x}/P_m = 5.00$			$P_{t,x}/P_m = 4.98$			$P_{t,x}/P_m = 4.99$		
12.01	.719	-0.039	-0.031	-0.019	-0.037	-0.027	-0.015	-0.108	-0.095	-0.085	-0.098	-0.077	-0.056
10.39	.737	-0.070	-0.050	-0.030	-0.070	-0.050	-0.030	-0.113	-0.110	-0.108	-0.121	-0.099	-0.079
8.76	.752	-0.072	-0.052	-0.032	-0.072	-0.052	-0.032	-0.115	-0.112	-0.110	-0.123	-0.101	-0.081
7.18	.768	-0.074	-0.054	-0.034	-0.074	-0.054	-0.034	-0.117	-0.115	-0.113	-0.125	-0.103	-0.083
5.76	.785	-0.075	-0.055	-0.035	-0.075	-0.055	-0.035	-0.118	-0.116	-0.114	-0.126	-0.104	-0.084
4.35	.802	-0.076	-0.056	-0.036	-0.076	-0.056	-0.036	-0.119	-0.117	-0.115	-0.127	-0.105	-0.085
3.35	.819	-0.077	-0.057	-0.037	-0.077	-0.057	-0.037	-0.120	-0.118	-0.116	-0.128	-0.106	-0.086
2.35	.835	-0.078	-0.058	-0.038	-0.078	-0.058	-0.038	-0.121	-0.119	-0.117	-0.129	-0.107	-0.087
1.34	.852	-0.079	-0.059	-0.039	-0.079	-0.059	-0.039	-0.122	-0.120	-0.118	-0.130	-0.108	-0.088
.73	.868	-0.080	-0.060	-0.040	-0.080	-0.060	-0.040	-0.123	-0.121	-0.119	-0.131	-0.109	-0.089
.39	.885	-0.081	-0.061	-0.041	-0.081	-0.061	-0.041	-0.124	-0.122	-0.120	-0.132	-0.110	-0.089
.17	.906	-0.082	-0.062	-0.042	-0.082	-0.062	-0.042	-0.125	-0.123	-0.121	-0.133	-0.111	-0.090
		$P_{t,x}/P_m = 6.98$			$P_{t,x}/P_m = 6.99$			$P_{t,x}/P_m = 6.97$			$P_{t,x}/P_m = 7.02$		
12.01	.719	-0.040	-0.031	-0.020	-0.037	-0.028	-0.014	-0.108	-0.095	-0.085	-0.098	-0.077	-0.056
10.39	.737	-0.071	-0.050	-0.030	-0.071	-0.051	-0.030	-0.113	-0.110	-0.108	-0.121	-0.099	-0.079
8.76	.752	-0.073	-0.052	-0.032	-0.073	-0.053	-0.032	-0.115	-0.112	-0.110	-0.123	-0.101	-0.081
7.18	.768	-0.075	-0.054	-0.034	-0.075	-0.055	-0.034	-0.117	-0.114	-0.112	-0.125	-0.103	-0.083
5.76	.785	-0.076	-0.055	-0.035	-0.076	-0.056	-0.035	-0.118	-0.115	-0.113	-0.126	-0.104	-0.084
4.35	.802	-0.077	-0.056	-0.036	-0.077	-0.057	-0.036	-0.119	-0.116	-0.114	-0.127	-0.105	-0.085
3.35	.819	-0.078	-0.057	-0.037	-0.078	-0.058	-0.037	-0.120	-0.117	-0.115	-0.128	-0.106	-0.086
2.35	.835	-0.079	-0.058	-0.038	-0.079	-0.059	-0.038	-0.121	-0.118	-0.116	-0.129	-0.107	-0.087
1.34	.852	-0.080	-0.059	-0.039	-0.080	-0.060	-0.039	-0.122	-0.119	-0.117	-0.130	-0.108	-0.088
.73	.868	-0.081	-0.060	-0.040	-0.081	-0.061	-0.040	-0.123	-0.120	-0.118	-0.131	-0.109	-0.089
.39	.885	-0.082	-0.061	-0.041	-0.082	-0.062	-0.041	-0.124	-0.121	-0.119	-0.132	-0.110	-0.089
.17	.906	-0.083	-0.062	-0.042	-0.083	-0.063	-0.042	-0.125	-0.122	-0.120	-0.133	-0.111	-0.090
		$P_{t,x}/P_m = 8.98$			$P_{t,x}/P_m = 8.97$			$P_{t,x}/P_m = 8.96$			$P_{t,x}/P_m = 8.99$		
12.01	.719	-0.039	-0.031	-0.020	-0.036	-0.027	-0.014	-0.108	-0.095	-0.085	-0.098	-0.077	-0.056
10.39	.737	-0.072	-0.051	-0.031	-0.072	-0.052	-0.030	-0.113	-0.110	-0.108	-0.121	-0.099	-0.079
8.76	.752	-0.074	-0.053	-0.033	-0.074	-0.054	-0.032	-0.115	-0.112	-0.110	-0.123	-0.101	-0.081
7.18	.768	-0.076	-0.055	-0.035	-0.076	-0.056	-0.034	-0.117	-0.114	-0.112	-0.125	-0.103	-0.083
5.76	.785	-0.077	-0.056	-0.036	-0.077	-0.057	-0.035	-0.118	-0.115	-0.113	-0.126	-0.104	-0.084
4.35	.802	-0.078	-0.057	-0.037	-0.078	-0.058	-0.036	-0.119	-0.116	-0.114	-0.127	-0.105	-0.085
3.35	.819	-0.079	-0.058	-0.038	-0.079	-0.059	-0.037	-0.120	-0.117	-0.115	-0.128	-0.106	-0.086
2.35	.835	-0.080	-0.059	-0.039	-0.080	-0.060	-0.038	-0.121	-0.118	-0.116	-0.129	-0.107	-0.087
1.34	.852	-0.081	-0.060	-0.040	-0.081	-0.061	-0.039	-0.122	-0.119	-0.117	-0.130	-0.108	-0.088
.73	.868	-0.082	-0.061	-0.041	-0.082	-0.062	-0.040	-0.123	-0.120	-0.118	-0.131	-0.109	-0.089
.39	.885	-0.083	-0.062	-0.042	-0.083	-0.063	-0.041	-0.124	-0.121	-0.119	-0.132	-0.110	-0.089
.17	.906	-0.084	-0.063	-0.043	-0.084	-0.064	-0.042	-0.125	-0.122	-0.120	-0.133	-0.111	-0.090
		$P_{t,x}/P_m = 10.99$			$P_{t,x}/P_m = 10.99$			$P_{t,x}/P_m = 10.99$			$P_{t,x}/P_m = 10.99$		
12.01	.719							-0.108	-0.096	-0.085	-0.099	-0.077	-0.056
10.39	.737							-0.113	-0.112	-0.108	-0.103	-0.083	-0.063
8.76	.752							-0.123	-0.121	-0.118	-0.117	-0.097	-0.077
7.18	.768							-0.124	-0.123	-0.120	-0.121	-0.101	-0.081
5.76	.785							-0.125	-0.124	-0.121	-0.122	-0.102	-0.082
4.35	.802							-0.126	-0.125	-0.122	-0.123	-0.103	-0.083
3.35	.819							-0.127	-0.126	-0.12			

TABLE III.- AFTERBODY PRESSURE COEFFICIENTS - Continued

(b) Aftertody I - Concluded

$$t_3 = 1,200^\circ \text{ F}$$

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TABLE III.- AFTERBODY PRESSURE COEFFICIENTS - Continued

(a) Afterbody II

 $t_j = \text{Cold}$ 

$\frac{x}{d}$	$\frac{x}{l_{\max}}$	Pressure coefficients for -											
		$M_\infty = 0.80$			$M_\infty = 0.90$			$M_\infty = 1.00$			$M_\infty = 1.10$		
		$\theta = 0^\circ$	$\theta = 45^\circ$	$\theta = 72^\circ$	$\theta = 0^\circ$	$\theta = 45^\circ$	$\theta = 72^\circ$	$\theta = 0^\circ$	$\theta = 45^\circ$	$\theta = 72^\circ$	$\theta = 0^\circ$	$\theta = 45^\circ$	$\theta = 72^\circ$
$P_{t,j}/P_\infty = 1.09$		$P_{t,j}/P_\infty = 1.12$			$P_{t,j}/P_\infty = 1.12$			$P_{t,j}/P_\infty = 1.09$			$P_{t,j}/P_\infty = 1.09$		
12.01	.719	-0.006	-0.020	-0.010	-0.008	-0.015	-0.005	-0.100	-0.096	-0.088	-0.046	-0.043	-0.032
10.39	.757	-0.042	-0.057	-0.031	-0.042	-0.057	-0.031	-0.087	-0.083	-0.077	-0.049	-0.044	-0.038
8.76	.795	-0.076	-0.073	-0.073	-0.068	-0.066	-0.061	-0.117	-0.113	-0.113	-0.076	-0.074	-0.074
7.18	.832	-0.121	-0.118	-0.116	-0.114	-0.112	-0.109	-0.171	-0.169	-0.169	-0.119	-0.120	-0.118
5.56	.870	-0.192	-0.192	-0.192	-0.191	-0.191	-0.191	-0.247	-0.247	-0.247	-0.181	-0.181	-0.180
3.93	.908	-0.258	-0.258	-0.258	-0.258	-0.258	-0.258	-0.321	-0.321	-0.321	-0.247	-0.247	-0.247
2.35	.943	-0.304	-0.304	-0.304	-0.304	-0.304	-0.304	-0.381	-0.381	-0.381	-0.303	-0.303	-0.303
1.74	.963	-0.343	-0.343	-0.343	-0.343	-0.343	-0.343	-0.424	-0.424	-0.424	-0.321	-0.321	-0.321
.13	.983	-0.374	-0.374	-0.374	-0.374	-0.374	-0.374	-0.459	-0.459	-0.459	-0.350	-0.350	-0.350
.17	.996	-0.395	-0.395	-0.395	-0.395	-0.395	-0.395	-0.481	-0.481	-0.481	-0.366	-0.366	-0.366
$P_{t,j}/P_\infty = 1.98$		$P_{t,j}/P_\infty = 1.99$			$P_{t,j}/P_\infty = 2.00$			$P_{t,j}/P_\infty = 1.99$			$P_{t,j}/P_\infty = 1.99$		
12.01	.719	-0.006	-0.021	-0.010	-0.006	-0.017	-0.006	-0.099	-0.096	-0.083	-0.049	-0.046	-0.035
10.39	.757	-0.042	-0.057	-0.031	-0.042	-0.057	-0.031	-0.086	-0.083	-0.077	-0.045	-0.046	-0.040
8.76	.795	-0.076	-0.073	-0.073	-0.068	-0.068	-0.079	-0.115	-0.113	-0.111	-0.079	-0.078	-0.077
7.18	.832	-0.120	-0.117	-0.115	-0.118	-0.116	-0.116	-0.169	-0.167	-0.167	-0.121	-0.122	-0.120
5.56	.870	-0.188	-0.190	-0.190	-0.188	-0.187	-0.187	-0.247	-0.247	-0.247	-0.181	-0.181	-0.181
3.93	.908	-0.246	-0.246	-0.246	-0.246	-0.246	-0.246	-0.320	-0.320	-0.320	-0.247	-0.247	-0.247
2.35	.943	-0.284	-0.284	-0.284	-0.284	-0.284	-0.284	-0.381	-0.381	-0.381	-0.289	-0.289	-0.289
1.74	.963	-0.313	-0.313	-0.313	-0.313	-0.313	-0.313	-0.424	-0.424	-0.424	-0.321	-0.321	-0.321
.13	.983	-0.334	-0.334	-0.334	-0.334	-0.334	-0.334	-0.459	-0.459	-0.459	-0.350	-0.350	-0.350
.17	.996	-0.355	-0.355	-0.355	-0.355	-0.355	-0.355	-0.481	-0.481	-0.481	-0.366	-0.366	-0.366
$P_{t,j}/P_\infty = 3.00$		$P_{t,j}/P_\infty = 2.98$			$P_{t,j}/P_\infty = 2.99$			$P_{t,j}/P_\infty = 3.02$			$P_{t,j}/P_\infty = 3.02$		
12.01	.719	-0.027	-0.021	-0.009	-0.022	-0.015	-0.004	-0.101	-0.096	-0.084	-0.049	-0.046	-0.035
10.39	.757	-0.042	-0.057	-0.031	-0.040	-0.052	-0.029	-0.089	-0.085	-0.077	-0.050	-0.049	-0.039
8.76	.795	-0.077	-0.074	-0.072	-0.065	-0.063	-0.078	-0.115	-0.113	-0.112	-0.077	-0.077	-0.077
7.18	.832	-0.123	-0.117	-0.117	-0.120	-0.118	-0.118	-0.172	-0.170	-0.170	-0.123	-0.123	-0.123
5.56	.870	-0.191	-0.191	-0.191	-0.188	-0.187	-0.186	-0.247	-0.247	-0.247	-0.181	-0.181	-0.181
3.93	.908	-0.249	-0.249	-0.249	-0.246	-0.246	-0.246	-0.320	-0.320	-0.320	-0.247	-0.247	-0.247
2.35	.943	-0.288	-0.288	-0.288	-0.285	-0.285	-0.285	-0.381	-0.381	-0.381	-0.289	-0.289	-0.289
1.74	.963	-0.317	-0.317	-0.317	-0.314	-0.314	-0.314	-0.424	-0.424	-0.424	-0.321	-0.321	-0.321
.13	.983	-0.338	-0.338	-0.338	-0.335	-0.335	-0.335	-0.459	-0.459	-0.459	-0.350	-0.350	-0.350
.17	.996	-0.359	-0.359	-0.359	-0.356	-0.356	-0.356	-0.481	-0.481	-0.481	-0.366	-0.366	-0.366
$P_{t,j}/P_\infty = 4.96$		$P_{t,j}/P_\infty = 4.96$			$P_{t,j}/P_\infty = 4.99$			$P_{t,j}/P_\infty = 4.99$			$P_{t,j}/P_\infty = 4.99$		
12.01	.719	-0.028	-0.021	-0.012	-0.023	-0.017	-0.007	-0.103	-0.099	-0.089	-0.051	-0.050	-0.042
10.39	.757	-0.042	-0.057	-0.031	-0.039	-0.027	-0.029	-0.091	-0.087	-0.081	-0.051	-0.051	-0.039
8.76	.795	-0.077	-0.074	-0.072	-0.065	-0.063	-0.078	-0.115	-0.113	-0.112	-0.078	-0.078	-0.078
7.18	.832	-0.120	-0.118	-0.115	-0.110	-0.108	-0.105	-0.172	-0.172	-0.170	-0.121	-0.121	-0.121
5.56	.870	-0.187	-0.189	-0.188	-0.184	-0.184	-0.184	-0.247	-0.247	-0.247	-0.181	-0.181	-0.181
3.93	.908	-0.245	-0.247	-0.247	-0.242	-0.242	-0.242	-0.320	-0.320	-0.320	-0.247	-0.247	-0.247
2.35	.943	-0.284	-0.284	-0.284	-0.281	-0.281	-0.281	-0.381	-0.381	-0.381	-0.289	-0.289	-0.289
1.74	.963	-0.313	-0.313	-0.313	-0.310	-0.310	-0.310	-0.424	-0.424	-0.424	-0.321	-0.321	-0.321
.13	.983	-0.332	-0.332	-0.332	-0.329	-0.329	-0.329	-0.459	-0.459	-0.459	-0.350	-0.350	-0.350
.17	.996	-0.353	-0.353	-0.353	-0.350	-0.350	-0.350	-0.481	-0.481	-0.481	-0.366	-0.366	-0.366
$P_{t,j}/P_\infty = 6.50$		$P_{t,j}/P_\infty = 6.50$			$P_{t,j}/P_\infty = 6.99$			$P_{t,j}/P_\infty = 6.99$			$P_{t,j}/P_\infty = 6.99$		
12.01	.719							-0.102	-0.099	-0.085	-0.052	-0.052	-0.040
10.39	.757							-0.098	-0.095	-0.081	-0.052	-0.052	-0.036
8.76	.795							-0.119	-0.117	-0.115	-0.080	-0.080	-0.078
7.18	.832							-0.171	-0.171	-0.167	-0.121	-0.121	-0.120
5.56	.870							-0.271	-0.271	-0.273	-0.213	-0.213	-0.213
3.93	.908							-0.350	-0.348	-0.346	-0.276	-0.276	-0.276
2.35	.943							-0.707	-0.695	-0.681	-0.531	-0.531	-0.526
1.74	.963							-0.181	-0.179	-0.178	-0.121	-0.121	-0.120
.13	.983							-0.186	-0.186	-0.187	-0.120	-0.120	-0.120
.17	.996							-0.199	-0.196	-0.199	-0.121	-0.121	-0.120

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TABLE III.- AFTERBODY PRESSURE COEFFICIENTS - Continued

(c) Afterbody II - Continued

$$t_1 = 800^\circ \text{ F}$$

TABLE III.- AFTERBODY PRESSURE COEFFICIENTS - Continued

(e) Afterbody II - Calculated

 $t_4 = 1,200^{\circ} F$ 

$\frac{x}{d_A}$	$\frac{x}{l_{max}}$	Pressure coefficients for -											
		$M_\infty = 0.80$			$M_\infty = 0.90$			$M_\infty = 1.00$			$M_\infty = 1.10$		
		$\theta = 0^\circ$	$\theta = 45^\circ$	$\theta = 72^\circ$	$\theta = 0^\circ$	$\theta = 45^\circ$	$\theta = 72^\circ$	$\theta = 0^\circ$	$\theta = 45^\circ$	$\theta = 72^\circ$	$\theta = 0^\circ$	$\theta = 45^\circ$	$\theta = 72^\circ$
		$P_{t,i}/P_\infty = 2.01$			$P_{t,i}/P_\infty = 1.96$			$P_{t,i}/P_\infty = 1.98$			$P_{t,i}/P_\infty = 2.09$		
12.01	.719	-0.029	-0.022	-0.011	-0.023	-0.015	-0.006	-0.099	-0.093	-0.085	-0.050	-0.048	-0.037
10.59	.727	-0.041	-0.039	-0.034	-0.040	-0.036	-0.028	-0.085	-0.085	-0.071	-0.051	-0.046	-0.030
8.76	.795	-0.080	-0.077	-0.074	-0.084	-0.082	-0.079	-0.116	-0.113	-0.113	-0.078	-0.079	-0.076
7.18	.832	-0.122	-0.121	-0.117	-0.129	-0.128	-0.125	-0.159	-0.159	-0.154	-0.120	-0.122	-0.120
5.56	.870	-0.152	-0.152	-0.153	-0.155	-0.154	-0.151	-0.185	-0.186	-0.185	-0.150	-0.153	-0.152
3.93	.908	-0.188	-0.188	-0.189	-0.190	-0.189	-0.187	-0.222	-0.222	-0.221	-0.186	-0.187	-0.186
2.35	.945	-0.214	-0.214	-0.215	-0.216	-0.215	-0.214	-0.251	-0.251	-0.251	-0.214	-0.215	-0.214
1.75	.983	-0.238	-0.237	-0.237	-0.239	-0.238	-0.237	-0.271	-0.271	-0.271	-0.234	-0.235	-0.234
.75	.993	-0.257	-0.257	-0.257	-0.259	-0.258	-0.257	-0.290	-0.290	-0.290	-0.253	-0.254	-0.253
.17	.996	-0.268	-0.267	-0.267	-0.269	-0.268	-0.267	-0.299	-0.299	-0.299	-0.263	-0.263	-0.263
		$P_{t,i}/P_\infty = 3.03$			$P_{t,i}/P_\infty = 5.01$			$P_{t,i}/P_\infty = 8.99$			$P_{t,i}/P_\infty = 3.02$		
12.01	.719	-0.028	-0.021	-0.011	-0.022	-0.015	-0.005	-0.101	-0.095	-0.087	-0.052	-0.049	-0.039
10.59	.727	-0.043	-0.040	-0.032	-0.041	-0.037	-0.030	-0.088	-0.085	-0.076	-0.052	-0.051	-0.040
8.76	.795	-0.078	-0.077	-0.073	-0.086	-0.083	-0.080	-0.119	-0.117	-0.115	-0.077	-0.078	-0.076
7.18	.832	-0.121	-0.119	-0.117	-0.126	-0.124	-0.123	-0.166	-0.172	-0.166	-0.122	-0.124	-0.121
5.56	.870	-0.156	-0.152	-0.153	-0.157	-0.156	-0.154	-0.186	-0.187	-0.187	-0.148	-0.150	-0.148
3.93	.908	-0.192	-0.188	-0.188	-0.194	-0.186	-0.185	-0.229	-0.229	-0.228	-0.189	-0.190	-0.189
2.35	.945	-0.215	-0.214	-0.214	-0.218	-0.215	-0.214	-0.251	-0.251	-0.251	-0.214	-0.215	-0.214
1.75	.983	-0.238	-0.237	-0.237	-0.240	-0.238	-0.237	-0.271	-0.271	-0.271	-0.234	-0.235	-0.234
.75	.993	-0.257	-0.257	-0.257	-0.259	-0.258	-0.257	-0.290	-0.290	-0.290	-0.253	-0.254	-0.253
.17	.996	-0.268	-0.267	-0.267	-0.269	-0.268	-0.267	-0.299	-0.299	-0.299	-0.263	-0.263	-0.263
		$P_{t,i}/P_\infty = 4.99$			$P_{t,i}/P_\infty = 5.01$			$P_{t,i}/P_\infty = 4.97$			$P_{t,i}/P_\infty = 4.99$		
12.01	.719	-0.028	-0.021	-0.012	-0.023	-0.016	-0.005	-0.100	-0.095	-0.086	-0.050	-0.048	-0.043
10.59	.727	-0.044	-0.039	-0.033	-0.041	-0.037	-0.030	-0.086	-0.083	-0.076	-0.051	-0.046	-0.040
8.76	.795	-0.078	-0.076	-0.074	-0.084	-0.081	-0.078	-0.118	-0.116	-0.114	-0.078	-0.079	-0.077
7.18	.832	-0.121	-0.119	-0.117	-0.126	-0.124	-0.123	-0.166	-0.172	-0.166	-0.122	-0.124	-0.121
5.56	.870	-0.156	-0.152	-0.153	-0.157	-0.156	-0.154	-0.186	-0.187	-0.187	-0.148	-0.150	-0.148
3.93	.908	-0.192	-0.188	-0.188	-0.194	-0.186	-0.185	-0.229	-0.229	-0.228	-0.189	-0.190	-0.189
2.35	.945	-0.215	-0.214	-0.214	-0.218	-0.215	-0.214	-0.251	-0.251	-0.251	-0.214	-0.215	-0.214
1.75	.983	-0.238	-0.237	-0.237	-0.240	-0.238	-0.237	-0.271	-0.271	-0.271	-0.234	-0.235	-0.234
.75	.993	-0.257	-0.257	-0.257	-0.259	-0.258	-0.257	-0.290	-0.290	-0.290	-0.253	-0.254	-0.253
.17	.996	-0.268	-0.267	-0.267	-0.269	-0.268	-0.267	-0.299	-0.299	-0.299	-0.263	-0.263	-0.263
		$P_{t,i}/P_\infty = 6.97$			$P_{t,i}/P_\infty = 6.96$			$P_{t,i}/P_\infty = 7.00$			$P_{t,i}/P_\infty = 6.99$		
12.01	.719	-0.028	-0.021	-0.010	-0.023	-0.016	-0.005	-0.100	-0.096	-0.086	-0.055	-0.053	-0.044
10.59	.727	-0.041	-0.038	-0.030	-0.040	-0.036	-0.030	-0.086	-0.083	-0.076	-0.053	-0.049	-0.041
8.76	.795	-0.079	-0.076	-0.072	-0.083	-0.080	-0.076	-0.117	-0.115	-0.113	-0.079	-0.080	-0.079
7.18	.832	-0.118	-0.116	-0.114	-0.120	-0.119	-0.118	-0.158	-0.164	-0.162	-0.123	-0.125	-0.123
5.56	.870	-0.156	-0.152	-0.153	-0.158	-0.156	-0.154	-0.186	-0.187	-0.187	-0.148	-0.150	-0.148
3.93	.908	-0.192	-0.188	-0.188	-0.194	-0.186	-0.185	-0.229	-0.229	-0.228	-0.189	-0.190	-0.189
2.35	.945	-0.215	-0.214	-0.214	-0.218	-0.215	-0.214	-0.251	-0.251	-0.251	-0.214	-0.215	-0.214
1.75	.983	-0.238	-0.237	-0.237	-0.240	-0.238	-0.237	-0.271	-0.271	-0.271	-0.234	-0.235	-0.234
.75	.993	-0.257	-0.257	-0.257	-0.259	-0.258	-0.257	-0.290	-0.290	-0.290	-0.253	-0.254	-0.253
.17	.996	-0.268	-0.267	-0.267	-0.269	-0.268	-0.267	-0.299	-0.299	-0.299	-0.263	-0.263	-0.263
		$P_{t,i}/P_\infty = 8.96$			$P_{t,i}/P_\infty = 8.97$			$P_{t,i}/P_\infty = 9.00$			$P_{t,i}/P_\infty = 9.01$		
12.01	.719	-0.028	-0.022	-0.010	-0.022	-0.016	-0.004	-0.100	-0.094	-0.086	-0.056	-0.055	-0.046
10.59	.727	-0.041	-0.038	-0.032	-0.041	-0.036	-0.028	-0.087	-0.084	-0.076	-0.051	-0.047	-0.040
8.76	.795	-0.078	-0.076	-0.071	-0.084	-0.082	-0.076	-0.117	-0.115	-0.113	-0.078	-0.079	-0.076
7.18	.832	-0.118	-0.116	-0.114	-0.120	-0.119	-0.118	-0.158	-0.164	-0.162	-0.122	-0.124	-0.122
5.56	.870	-0.156	-0.152	-0.153	-0.158	-0.156	-0.154	-0.186	-0.187	-0.187	-0.148	-0.150	-0.148
3.93	.908	-0.192	-0.188	-0.188	-0.194	-0.186	-0.185	-0.229	-0.229	-0.228	-0.189	-0.190	-0.189
2.35	.945	-0.215	-0.214	-0.214	-0.218	-0.215	-0.214	-0.251	-0.251	-0.251	-0.214	-0.215	-0.214
1.75	.983	-0.238	-0.237	-0.237	-0.240	-0.238	-0.237	-0.271	-0.271	-0.271	-0.234	-0.235	-0.234
.75	.993	-0.257	-0.257	-0.257	-0.259	-0.258	-0.257	-0.290	-0.290	-0.290	-0.253	-0.254	-0.253
.17	.996	-0.268	-0.267	-0.267	-0.269	-0.268	-0.267	-0.299	-0.299	-0.299	-0.263	-0.263	-0.263
		$P_{t,i}/P_\infty = 10.99$			$P_{t,i}/P_\infty = 11.03$			$P_{t,i}/P_\infty = 10.99$			$P_{t,i}/P_\infty = 11.03$		
12.01	.719							-0.08	-0.08	-0.085	-0.06	-0.06	-0.057
10.59	.727							-0.115	-0.115	-0.115	-0.076	-0.076	-0.069
8.76	.795							-0.168	-0.167	-0.168	-0.121	-0.121	-0.119
7.18	.832							-0.269	-0.269	-0.270	-0.214	-0.214	-0.214
5.56	.870							-0.512	-0.511	-0.522	-0.276	-0.276	-0.276
3.93	.908							-0.599	-0.598	-0.600	-0.361	-0.361	-0.361
2.35	.945							-0.744	-0.743	-0.745	-0.460	-0.460	-0.460
1.75	.983							-0.868	-0.867	-0.868	-0.623	-0.623	-0.623
.75	.993							-1.177	-1.177	-1.179	-0.703	-0.703	-0.703
.17	.996							-1.260	-1.262	-1.263	-0.763	-0.763	-0.763

TABLE III.-- AFTERBODY PRESSURE COEFFICIENTS - Continued

(d) Afterbody III

 $t_3 = \text{Cold}$ 

$\frac{x}{d_3}$	$\frac{x}{l_{\max}}$	Pressure coefficients for -											
		M <sub>a</sub> = 0.80			M <sub>a</sub> = 0.90			M <sub>a</sub> = 1.00			M <sub>a</sub> = 1.10		
		$P_{t_3,j}/P_a = 1.04$			$P_{t_3,j}/P_a = 1.04$			$P_{t_3,j}/P_a = 1.03$			$P_{t_3,j}/P_a = 0.94$		
		$\theta = 0^\circ$	$\theta = 45^\circ$	$\theta = 72^\circ$	$\theta = 0^\circ$	$\theta = 45^\circ$	$\theta = 72^\circ$	$\theta = 0^\circ$	$\theta = 45^\circ$	$\theta = 72^\circ$	$\theta = 0^\circ$	$\theta = 45^\circ$	$\theta = 72^\circ$
12.01	.719	-.018	-.012	.001	-.012	-.006	.006	-.101	-.097	-.080	-.050	-.043	-.030
10.39	.757	-.004	-.019	-.013	-.002	-.014	-.006	-.026	-.030	-.076	-.056	-.050	-.042
8.76	.795	-.022	-.029	-.017	-.028	-.023	-.022	-.074	-.071	-.067	-.058	-.050	-.042
7.18	.832	-.045	-.035	-.025	-.045	-.032	-.042	-.082	-.081	-.080	-.076	-.068	-.063
5.36	.870	-.099	-.023	-.005	-.094	-.055	-.094	-.123	-.129	-.129	-.123	-.116	-.104
3.58	.908	-.016	-.020	-.010	-.015	-.015	-.015	-.023	-.029	-.029	-.023	-.020	-.019
2.39	.936	-.001	-.022	-.007	-.001	-.005	-.001	-.025	-.036	-.036	-.022	-.019	-.018
1.34	.953	-.003	-.005	-.003	-.003	-.003	-.003	-.007	-.019	-.021	-.015	-.010	-.008
.73	.983	.095	.093	.090	.068	.068	.068	.056	.005	.005	.001	.001	.000
.50	.995	.090	.090	.088	.066	.066	.066	.064	.003	.003	.001	.001	.000
.17	.996	.088	.088	.085	.064	.064	.064	.061	-.001	-.001	.001	.001	.000
		$P_{t_3,j}/P_a = 1.97$			$P_{t_3,j}/P_a = 2.00$			$P_{t_3,j}/P_a = 2.10$			$P_{t_3,j}/P_a = 2.00$		
12.01	.719	-.019	-.013	-.000	-.013	-.006	.008	-.101	-.094	-.079	-.049	-.043	-.030
10.39	.757	-.025	-.019	-.014	-.019	-.013	-.007	-.086	-.079	-.074	-.057	-.050	-.042
8.76	.795	-.028	-.009	-.005	-.027	-.008	-.021	-.073	-.070	-.066	-.061	-.050	-.042
7.18	.832	-.047	-.005	-.015	-.042	-.032	-.041	-.061	-.060	-.068	-.051	-.049	-.046
5.36	.870	-.100	-.059	-.056	-.105	-.100	-.099	-.093	-.087	-.087	-.073	-.067	-.068
3.58	.908	-.002	-.022	-.020	-.025	-.025	-.024	-.234	-.196	-.196	-.155	-.152	-.152
2.39	.936	-.282	-.272	-.283	-.276	-.284	-.284	-.256	-.200	-.200	-.173	-.172	-.172
1.34	.953	-.008	-.023	-.012	-.012	-.012	-.013	-.027	-.027	-.027	-.027	-.025	-.025
.73	.983	-.003	-.007	-.003	-.005	-.005	-.005	-.007	-.009	-.009	-.009	-.009	-.009
.50	.995	.076	.071	.070	.061	.061	.061	.056	-.009	-.009	-.011	-.010	-.009
.17	.996	.077	.073	.071	.068	.068	.068	.064	-.007	-.009	-.009	-.010	-.008
		$P_{t_3,j}/P_a = 3.01$			$P_{t_3,j}/P_a = 3.99$			$P_{t_3,j}/P_a = 3.00$			$P_{t_3,j}/P_a = 3.00$		
12.01	.719	-.019	-.012	.002	-.013	-.006	.009	-.101	-.098	-.080	-.049	-.043	-.030
10.39	.757	-.024	-.018	-.013	-.020	-.013	-.007	-.086	-.080	-.074	-.057	-.050	-.042
8.76	.795	-.031	-.008	-.026	-.028	-.024	-.026	-.074	-.072	-.067	-.060	-.059	-.054
7.18	.832	-.046	-.005	-.045	-.045	-.042	-.042	-.065	-.062	-.060	-.053	-.050	-.046
5.36	.870	-.100	-.055	-.054	-.104	-.100	-.099	-.093	-.091	-.091	-.073	-.068	-.068
3.58	.908	-.003	-.020	-.018	-.025	-.025	-.024	-.234	-.200	-.198	-.154	-.152	-.152
2.39	.936	-.283	-.273	-.284	-.280	-.286	-.286	-.256	-.221	-.217	-.174	-.172	-.172
1.34	.953	-.008	-.022	-.012	-.012	-.012	-.013	-.021	-.021	-.021	-.021	-.017	-.017
.73	.983	-.003	-.007	-.003	-.005	-.005	-.005	-.004	-.019	-.021	-.021	-.017	-.015
.50	.995	.077	.068	.068	.065	.065	.065	.061	-.023	-.023	-.023	-.017	-.017
.17	.996	.072	.070	.068	.069	.069	.069	.065	-.019	-.021	-.021	-.016	-.017
		$P_{t_3,j}/P_a = 4.96$			$P_{t_3,j}/P_a = 4.97$			$P_{t_3,j}/P_a = 4.97$			$P_{t_3,j}/P_a = 5.00$		
12.01	.719	-.023	-.013	.000	-.016	-.009	.007	-.100	-.094	-.078	-.049	-.043	-.030
10.39	.757	-.025	-.020	-.013	-.020	-.014	-.006	-.087	-.080	-.074	-.057	-.050	-.042
8.76	.795	-.033	-.029	-.027	-.027	-.026	-.026	-.074	-.071	-.067	-.060	-.059	-.054
7.18	.832	-.048	-.005	-.045	-.045	-.042	-.042	-.062	-.061	-.059	-.053	-.049	-.049
5.36	.870	-.102	-.099	-.095	-.104	-.100	-.099	-.096	-.089	-.090	-.078	-.067	-.068
3.58	.908	-.003	-.024	-.020	-.026	-.025	-.024	-.024	-.199	-.196	-.196	-.155	-.153
2.39	.936	-.279	-.279	-.285	-.285	-.287	-.287	-.256	-.223	-.223	-.187	-.187	-.187
1.34	.953	-.031	-.005	-.008	-.013	-.009	-.010	-.027	-.018	-.022	-.021	-.170	-.170
.73	.983	-.078	.069	.068	.052	.054	.043	-.029	-.019	-.020	-.167	-.166	-.166
.50	.995	.070	.065	.065	.046	.046	.037	-.026	-.024	-.024	-.153	-.154	-.153
.17	.996	.071	.068	.066	.048	.046	.037	-.025	-.013	-.013	-.152	-.151	-.152
		$P_{t_3,j}/P_a = 6.98$			$P_{t_3,j}/P_a = 6.99$			$P_{t_3,j}/P_a = 6.98$			$P_{t_3,j}/P_a = 6.99$		
12.01	.719							-.102	-.092	-.082	-.049	-.043	-.030
10.39	.757							-.086	-.077	-.067	-.057	-.050	-.042
8.76	.795							-.074	-.071	-.067	-.061	-.056	-.050
7.18	.832							-.063	-.061	-.060	-.053	-.050	-.046
5.36	.870							-.055	-.050	-.049	-.073	-.069	-.069
3.58	.908							-.199	-.197	-.197	-.155	-.154	-.154
2.39	.936							-.368	-.360	-.367	-.308	-.356	-.356
1.34	.953							-.026	-.028	-.033	-.169	-.150	-.150
.73	.983							-.032	-.029	-.033	-.161	-.139	-.139
.50	.995							-.036	-.033	-.037	-.148	-.146	-.146
.17	.996							-.020	-.023	-.021	-.138	-.145	-.145

TABLE III.- AFTERBODY PRESSURE COEFFICIENTS - Continued

(4) Afterbody III - Continued

 $t_1 = 800^{\circ} F$ 

$\frac{x}{d_3}$	$\frac{x}{l_{max}}$	Pressure coefficients for -											
		M <sub>a</sub> = 0.80			M <sub>a</sub> = 0.90			M <sub>a</sub> = 1.00			M <sub>a</sub> = 1.10		
		θ = 0°			θ = 45°			θ = 72°			θ = 0°		
		$P_{t,i}/P_m = 1.97$			$P_{t,i}/P_m = 2.00$			$P_{t,i}/P_m = 1.99$			$P_{t,i}/P_m = 1.98$		
12.01	.719	-.020	-.012	.001	-.015	-.005	.007	-.102	-.097	-.081	-.096	-.091	-.097
10.39	.737	-.026	-.019	-.013	-.020	-.014	-.008	-.067	-.063	-.076	-.063	-.079	-.069
8.76	.755	-.032	-.029	-.026	-.038	-.023	-.022	-.073	-.072	-.069	-.065	-.063	-.068
7.18	.812	-.047	-.035	-.044	-.043	-.043	-.042	-.064	-.062	-.061	-.051	-.060	-.051
5.36	.870	-.103	-.095	-.094	-.105	-.099	-.099	-.053	-.051	-.092	-.076	-.070	-.071
3.93	.908	-.201	-.190	-.199	-.205	-.194	-.194	-.124	-.120	-.158	-.158	-.154	-.154
2.73	.935	-.256	-.249	-.259	-.269	-.267	-.267	-.102	-.100	-.151	-.148	-.141	-.141
1.54	.964	-.015	-.009	-.010	-.015	-.013	-.013	-.014	-.012	-.013	-.008	-.008	-.012
.73	.983	.084	.082	.083	.084	.086	.086	.060	.061	.011	.011	.002	.002
.50	.993	.079	.076	.076	.079	.076	.076	-.010	-.011	-.009	-.009	-.009	-.009
.17	.996	.079	.076	.075	.075	.075	.075	-.010	-.011	-.009	-.009	-.009	-.009
		$P_{t,i}/P_m = 3.02$			$P_{t,i}/P_m = 2.98$			$P_{t,i}/P_m = 3.00$			$P_{t,i}/P_m = 3.02$		
12.01	.719	-.021	-.018	-.003	-.015	-.007	.006	-.104	-.098	-.098	-.094	-.098	-.098
10.39	.737	-.027	-.020	-.013	-.021	-.015	-.009	-.060	-.060	-.068	-.062	-.063	-.065
8.76	.755	-.034	-.031	-.028	-.039	-.027	-.022	-.077	-.077	-.071	-.064	-.063	-.071
7.18	.812	-.049	-.047	-.046	-.044	-.044	-.042	-.065	-.065	-.063	-.060	-.060	-.060
5.36	.870	-.102	-.095	-.095	-.105	-.099	-.099	-.066	-.063	-.098	-.076	-.070	-.070
3.93	.908	-.203	-.193	-.193	-.205	-.197	-.197	-.120	-.118	-.158	-.158	-.154	-.154
2.73	.935	-.262	-.251	-.252	-.273	-.273	-.273	-.126	-.125	-.165	-.165	-.160	-.160
1.54	.964	-.028	-.023	-.024	-.032	-.031	-.031	-.027	-.027	-.021	-.021	-.019	-.019
.73	.983	.050	.048	.048	.054	.053	.053	.060	.059	.021	.021	.016	.016
.50	.993	.073	.073	.073	.073	.073	.073	-.019	-.019	-.019	-.019	-.016	-.016
.17	.996	.073	.074	.072	.071	.071	.071	-.019	-.019	-.019	-.019	-.016	-.016
		$P_{t,i}/P_m = 4.96$			$P_{t,i}/P_m = 4.97$			$P_{t,i}/P_m = 4.97$			$P_{t,i}/P_m = 4.97$		
12.01	.719	-.018	-.012	.002	-.013	-.006	.008	-.102	-.096	-.082	-.094	-.098	-.098
10.39	.737	-.022	-.018	-.012	-.019	-.013	-.007	-.067	-.062	-.073	-.063	-.062	-.068
8.76	.755	-.031	-.028	-.026	-.036	-.023	-.020	-.074	-.073	-.068	-.065	-.062	-.067
7.18	.812	-.046	-.044	-.042	-.043	-.042	-.041	-.064	-.063	-.061	-.060	-.060	-.061
5.36	.870	-.109	-.099	-.095	-.103	-.098	-.099	-.097	-.091	-.092	-.076	-.076	-.071
3.93	.908	-.204	-.190	-.191	-.201	-.194	-.195	-.125	-.121	-.158	-.158	-.152	-.152
2.73	.935	-.264	-.255	-.255	-.275	-.271	-.272	-.120	-.117	-.165	-.165	-.160	-.160
1.54	.964	-.029	-.025	-.025	-.031	-.029	-.029	-.024	-.024	-.021	-.021	-.016	-.016
.73	.983	.053	.053	.053	.058	.053	.053	.056	.055	.027	.027	.015	.015
.50	.993	.073	.073	.072	.073	-.067	-.067	-.027	-.027	-.115	-.115	-.112	-.112
.17	.996	.073	.073	.069	.073	-.069	-.069	-.044	-.044	-.021	-.021	-.119	-.119
		$P_{t,i}/P_m = 6.99$			$P_{t,i}/P_m = 6.96$			$P_{t,i}/P_m = 6.98$			$P_{t,i}/P_m = 6.97$		
12.01	.719	-.018	-.013	.008	-.013	-.006	.006	-.102	-.097	-.081	-.096	-.091	-.096
10.39	.737	-.023	-.018	-.011	-.020	-.014	-.008	-.067	-.062	-.076	-.064	-.066	-.069
8.76	.755	-.031	-.029	-.026	-.037	-.023	-.022	-.074	-.073	-.068	-.065	-.062	-.067
7.18	.812	-.046	-.043	-.042	-.047	-.042	-.042	-.063	-.063	-.061	-.059	-.059	-.064
5.36	.870	-.104	-.094	-.094	-.104	-.098	-.099	-.096	-.095	-.098	-.076	-.076	-.072
3.93	.908	-.201	-.191	-.191	-.201	-.194	-.194	-.127	-.127	-.156	-.156	-.151	-.151
2.73	.935	-.265	-.257	-.257	-.275	-.266	-.266	-.129	-.129	-.166	-.166	-.161	-.161
1.54	.964	-.028	-.025	-.025	-.036	-.025	-.025	-.024	-.024	-.022	-.022	-.016	-.016
.73	.983	.053	.053	.053	.058	-.053	-.053	-.046	-.046	-.023	-.023	-.132	-.132
.50	.993	.073	.073	.069	.073	-.069	-.069	-.040	-.040	-.015	-.015	-.135	-.135
.17	.996	.068	.070	.065	.065	-.065	-.065	-.040	-.040	-.012	-.012	-.135	-.135
		$P_{t,i}/P_m = 8.97$			$P_{t,i}/P_m = 8.99$			$P_{t,i}/P_m = 8.97$			$P_{t,i}/P_m = 8.97$		
12.01	.719	-.023	-.016	-.003	-.013	-.006	.007	-.103	-.097	-.085	-.094	-.090	-.096
10.39	.737	-.029	-.021	-.013	-.020	-.013	-.008	-.068	-.062	-.073	-.063	-.063	-.068
8.76	.755	-.037	-.034	-.030	-.042	-.026	-.022	-.074	-.073	-.068	-.064	-.063	-.068
7.18	.812	-.052	-.049	-.044	-.054	-.044	-.041	-.064	-.063	-.062	-.059	-.059	-.060
5.36	.870	-.108	-.098	-.094	-.104	-.099	-.099	-.097	-.092	-.091	-.073	-.070	-.071
3.93	.908	-.205	-.197	-.197	-.205	-.199	-.199	-.120	-.119	-.156	-.156	-.151	-.151
2.73	.935	-.267	-.259	-.259	-.277	-.266	-.266	-.131	-.131	-.166	-.166	-.161	-.161
1.54	.964	-.029	-.026	-.026	-.037	-.026	-.026	-.024	-.024	-.022	-.022	-.016	-.016
.73	.983	.052	.052	.052	.058	-.052	-.052	-.040	-.040	-.023	-.023	-.133	-.133
.50	.993	.072	.072	.068	.072	-.068	-.068	-.040	-.040	-.017	-.017	-.133	-.133
.17	.996	.067	.066	.061	.064	-.064	-.064	-.035	-.035	-.016	-.016	-.127	-.127
		$P_{t,i}/P_m = 10.97$			$P_{t,i}/P_m = 8.99$			$P_{t,i}/P_m = 10.97$			$P_{t,i}/P_m = 11.01$		
12.01	.719							-.101	-.096	-.083	-.095	-.094	-.097
10.39	.737							-.096	-.081	-.074	-.083	-.082	-.087
8.76	.755							-.074	-.071	-.067	-.064	-.063	-.068
7.18	.812							-.064	-.062	-.058	-.062	-.060	-.066
5.36	.870							-.054	-.051	-.047	-.050	-.049	-.055
3.93	.908							-.039	-.036	-.031	-.030	-.029	-.036
2.73	.935							-.039	-.037	-.033	-.032	-.031	-.036
1.54	.964							-.036	-.035	-.032	-.031	-.030	-.035
.73	.983							-.032	-.031	-.028	-.027	-.026	-.030
.50	.993							-.033	-.032	-.029	-.028	-.027	-.031
.17	.996							-.030	-.029	-.027	-.026	-.025	-.029

CONFIDENTIAL

TABLE III.- AFTERBODY PRESSURE COEFFICIENTS - Continued

(4) Afterbody III - Continued

 $t_j = 1,200^{\circ} F$ 

$\frac{x}{d_1}$	$\frac{x}{x_{\max}}$	Pressure coefficients for -											
		M <sub>a</sub> = 0.80			M <sub>a</sub> = 0.90			M <sub>a</sub> = 1.00			M <sub>a</sub> = 1.10		
		$\theta = 0^{\circ}$	$\theta = 45^{\circ}$	$\theta = 72^{\circ}$	$\theta = 0^{\circ}$	$\theta = 45^{\circ}$	$\theta = 72^{\circ}$	$\theta = 0^{\circ}$	$\theta = 45^{\circ}$	$\theta = 72^{\circ}$	$\theta = 0^{\circ}$	$\theta = 45^{\circ}$	$\theta = 72^{\circ}$
		$P_{t,j}/P_m = 1.99$			$P_{t,j}/P_m = 2.02$			$P_{t,j}/P_m = 2.00$			$P_{t,j}/P_m = 1.99$		
12.01	.739	-0.035	-0.009	0.002	-0.018	-0.005	0.005	-0.101	-0.099	-0.093	-0.041	-0.039	-0.027
10.39	.737	-0.022	-0.017	-0.011	-0.021	-0.015	-0.009	-0.059	-0.053	-0.056	-0.047	-0.046	
8.76	.735	-0.039	-0.027	-0.023	-0.030	-0.027	-0.023	-0.076	-0.073	-0.070	-0.061	-0.059	-0.053
7.18	.832	-0.043	-0.048	-0.042	-0.045	-0.044	-0.042	-0.066	-0.063	-0.063	-0.054	-0.051	
5.56	.870	-0.097	-0.094	-0.093	-0.106	-0.100	-0.100	-0.097	-0.098	-0.098	-0.076	-0.069	-0.068
4.93	.908	-0.199	-0.199	-0.196	-0.237	-0.235	-0.235	-0.201	-0.199	-0.199	-0.156	-0.153	-0.153
3.55	.943	-0.233	-0.233	-0.231	-0.263	-0.276	-0.276	-0.296	-0.296	-0.296	-0.207	-0.196	-0.192
2.35	.964	-0.314	-0.316	-0.307	-0.318	-0.301	-0.301	-0.313	-0.300	-0.300	-0.218	-0.183	-0.174
1.54	.983	-0.385	-0.388	-0.391	-0.355	-0.357	-0.357	-0.313	-0.312	-0.312	-0.202	-0.160	-0.156
.73	.993	-0.393	-0.393	-0.396	-0.393	-0.393	-0.393	-0.355	-0.355	-0.355	-0.200	-0.160	-0.157
.50	.996	-0.392	-0.394	-0.393	-0.392	-0.392	-0.392	-0.355	-0.355	-0.355	-0.200	-0.160	-0.157
.17	.996												
		$P_{t,j}/P_m = 3.02$			$P_{t,j}/P_m = 3.02$			$P_{t,j}/P_m = 3.02$			$P_{t,j}/P_m = 3.02$		
12.01	.739	-0.019	-0.011	0.000	-0.011	-0.004	0.009	-0.101	-0.094	-0.086	-0.045	-0.040	-0.030
10.39	.737	-0.024	-0.028	-0.013	-0.019	-0.018	-0.006	-0.059	-0.062	-0.071	-0.026	-0.049	-0.044
8.76	.735	-0.038	-0.028	-0.026	-0.027	-0.025	-0.020	-0.076	-0.078	-0.070	-0.055	-0.065	-0.056
7.18	.832	-0.046	-0.046	-0.042	-0.042	-0.042	-0.040	-0.086	-0.085	-0.085	-0.072	-0.071	-0.071
5.56	.870	-0.100	-0.094	-0.094	-0.100	-0.099	-0.099	-0.123	-0.123	-0.123	-0.075	-0.070	-0.070
4.93	.908	-0.203	-0.203	-0.201	-0.201	-0.201	-0.201	-0.226	-0.226	-0.226	-0.169	-0.157	-0.156
3.55	.943	-0.265	-0.265	-0.274	-0.276	-0.280	-0.280	-0.299	-0.299	-0.299	-0.204	-0.188	-0.182
2.35	.964	-0.322	-0.322	-0.321	-0.321	-0.321	-0.321	-0.349	-0.349	-0.349	-0.205	-0.187	-0.186
1.54	.983	-0.394	-0.394	-0.388	-0.388	-0.388	-0.388	-0.413	-0.413	-0.413	-0.206	-0.180	-0.177
.73	.993	-0.393	-0.393	-0.383	-0.390	-0.393	-0.393	-0.409	-0.409	-0.409	-0.205	-0.180	-0.176
.50	.996	-0.392	-0.392	-0.372	-0.394	-0.393	-0.393	-0.408	-0.408	-0.408	-0.203	-0.179	-0.175
.17	.996	-0.074	-0.079	-0.061	-0.053	-0.053	-0.053	-0.106	-0.105	-0.107	-0.071	-0.103	
		$P_{t,j}/P_m = 4.96$			$P_{t,j}/P_m = 4.99$			$P_{t,j}/P_m = 4.97$			$P_{t,j}/P_m = 4.99$		
12.01	.739	-0.019	-0.010	0.000	-0.012	-0.004	0.006	-0.100	-0.093	-0.082	-0.043	-0.039	-0.027
10.39	.737	-0.023	-0.018	-0.012	-0.022	-0.017	-0.009	-0.058	-0.053	-0.076	-0.026	-0.048	-0.040
8.76	.735	-0.036	-0.029	-0.026	-0.038	-0.027	-0.025	-0.075	-0.073	-0.070	-0.062	-0.059	-0.054
7.18	.832	-0.045	-0.044	-0.044	-0.044	-0.043	-0.042	-0.085	-0.084	-0.083	-0.072	-0.071	-0.071
5.56	.870	-0.099	-0.094	-0.092	-0.100	-0.099	-0.099	-0.123	-0.123	-0.123	-0.075	-0.074	-0.073
4.93	.908	-0.203	-0.203	-0.201	-0.201	-0.201	-0.201	-0.229	-0.229	-0.229	-0.168	-0.156	-0.155
3.55	.943	-0.265	-0.265	-0.274	-0.276	-0.280	-0.280	-0.299	-0.299	-0.299	-0.169	-0.157	-0.156
2.35	.964	-0.322	-0.322	-0.321	-0.321	-0.321	-0.321	-0.349	-0.349	-0.349	-0.205	-0.187	-0.186
1.54	.983	-0.394	-0.394	-0.377	-0.393	-0.393	-0.393	-0.413	-0.413	-0.413	-0.205	-0.180	-0.177
.73	.993	-0.393	-0.393	-0.376	-0.394	-0.393	-0.393	-0.408	-0.408	-0.408	-0.203	-0.179	-0.175
.50	.996	-0.392	-0.392	-0.371	-0.394	-0.393	-0.393	-0.408	-0.408	-0.408	-0.202	-0.178	-0.174
.17	.996	-0.069	-0.076	-0.071	-0.076	-0.071	-0.071	-0.106	-0.105	-0.107	-0.071	-0.103	
		$P_{t,j}/P_m = 7.00$			$P_{t,j}/P_m = 7.02$			$P_{t,j}/P_m = 7.00$			$P_{t,j}/P_m = 7.02$		
12.01	.739	-0.019	-0.010	0.001	-0.012	-0.006	0.008	-0.099	-0.093	-0.082	-0.043	-0.038	-0.027
10.39	.737	-0.023	-0.018	-0.012	-0.021	-0.013	-0.008	-0.058	-0.060	-0.073	-0.026	-0.046	-0.037
8.76	.735	-0.036	-0.028	-0.026	-0.038	-0.027	-0.025	-0.072	-0.070	-0.068	-0.061	-0.058	-0.053
7.18	.832	-0.047	-0.044	-0.044	-0.044	-0.042	-0.042	-0.086	-0.085	-0.085	-0.072	-0.070	-0.070
5.56	.870	-0.099	-0.094	-0.092	-0.100	-0.099	-0.099	-0.123	-0.123	-0.123	-0.075	-0.074	-0.073
4.93	.908	-0.203	-0.203	-0.201	-0.201	-0.201	-0.201	-0.229	-0.229	-0.229	-0.168	-0.156	-0.155
3.55	.943	-0.265	-0.265	-0.274	-0.276	-0.280	-0.280	-0.299	-0.299	-0.299	-0.169	-0.157	-0.156
2.35	.964	-0.322	-0.322	-0.321	-0.321	-0.321	-0.321	-0.349	-0.349	-0.349	-0.205	-0.187	-0.186
1.54	.983	-0.394	-0.394	-0.377	-0.393	-0.393	-0.393	-0.413	-0.413	-0.413	-0.205	-0.180	-0.177
.73	.993	-0.393	-0.393	-0.376	-0.394	-0.393	-0.393	-0.408	-0.408	-0.408	-0.203	-0.179	-0.175
.50	.996	-0.392	-0.392	-0.371	-0.394	-0.393	-0.393	-0.408	-0.408	-0.408	-0.202	-0.178	-0.174
.17	.996	-0.070	-0.076	-0.071	-0.076	-0.071	-0.071	-0.106	-0.105	-0.107	-0.071	-0.103	
		$P_{t,j}/P_m = 8.96$			$P_{t,j}/P_m = 9.00$			$P_{t,j}/P_m = 9.04$			$P_{t,j}/P_m = 9.01$		
12.01	.739	-0.017	-0.009	0.002	-0.010	-0.003	0.009	-0.099	-0.093	-0.082	-0.040	-0.037	-0.029
10.39	.737	-0.023	-0.017	-0.012	-0.017	-0.011	-0.005	-0.056	-0.057	-0.074	-0.026	-0.046	-0.037
8.76	.735	-0.031	-0.026	-0.024	-0.038	-0.023	-0.019	-0.073	-0.073	-0.069	-0.061	-0.057	-0.051
7.18	.832	-0.046	-0.044	-0.043	-0.046	-0.045	-0.038	-0.063	-0.065	-0.061	-0.055	-0.052	-0.052
5.56	.870	-0.099	-0.093	-0.092	-0.101	-0.096	-0.097	-0.123	-0.123	-0.123	-0.075	-0.073	-0.072
4.93	.908	-0.201	-0.200	-0.199	-0.231	-0.231	-0.231	-0.299	-0.299	-0.299	-0.169	-0.157	-0.156
3.55	.943	-0.265	-0.265	-0.274	-0.276	-0.280	-0.280	-0.349	-0.349	-0.349	-0.205	-0.187	-0.186
2.35	.964	-0.322	-0.322	-0.321	-0.321	-0.321	-0.321	-0.349	-0.349	-0.349	-0.205	-0.187	-0.186
1.54	.983	-0.394	-0.394	-0.377	-0.393	-0.393	-0.393	-0.413	-0.413	-0.413	-0.205	-0.180	-0.177
.73	.993	-0.393	-0.393	-0.376	-0.394	-0.393	-0.393	-0.408	-0.408	-0.408	-0.203	-0.179	-0.175
.50	.996	-0.392	-0.392	-0.371	-0.394	-0.393	-0.393	-0.408	-0.408	-0.408	-0.202	-0.178	-0.174
.17	.996	-0.073	-0.076	-0.073	-0.076	-0.073	-0.073	-0.106	-0.105	-0.107	-0.071	-0.103	
		$P_{t,j}/P_m = 10.98$			$P_{t,j}/P_m = 11.06$			$P_{t,j}/P_m = 11.06$			$P_{t,j}/P_m = 11.06$		
12.01	.739				-0.010	-0.002	0.009	-0.102	-0.094	-0.080	-0.043	-0.046	-0.027
10.39	.737				-0.016	-0.012	-0.003	-0.088	-0.083	-0.073	-0.056	-0.046	-0.038
8.76	.735				-0.028	-0.026	-0.019	-0.076	-0.073	-0.068	-0.062	-0.052	
7.18	.832				-0.040	-0.041	-0.040	-0.065	-0.063	-0.062	-0.056	-0.052	
5.56	.870				-0.100	-0.096	-0.095	-0.097	-0.095	-0.095	-0.076	-0.068	
4.93	.908				-0.267	-0.265	-0.265						

TABLE III.- AFTERBODY PRESSURE COEFFICIENTS - Continued

(a) Afterbody IV

 $t_j = \text{Cold}$ 

$\frac{x}{d_j}$	$\frac{x}{l_{\max}}$	Pressure coefficients for -											
		M <sub>a</sub> = 0.80			M <sub>a</sub> = 0.90			M <sub>a</sub> = 1.00			M <sub>a</sub> = 1.10		
		$\theta = 0^\circ$		$\theta = 45^\circ$	$\theta = 72^\circ$	$\theta = 0^\circ$		$\theta = 45^\circ$	$\theta = 72^\circ$	$\theta = 0^\circ$		$\theta = 45^\circ$	$\theta = 72^\circ$
		$P_{t,j}/P_a = 1.06$			$P_{t,j}/P_a = 1.04$			$P_{t,j}/P_a = 1.11$			$P_{t,j}/P_a = 1.06$		
7.95	.722	-0.043	-0.027	-0.006	-0.036	-0.049	0.003	-0.150	-0.126	-0.097	-0.073	-0.090	-0.019
7.36	.742	-0.042	-0.032	-0.016	-0.036	-0.021	-0.009	-0.119	-0.107	-0.090	-0.055	-0.042	-0.022
6.22	.752	-0.059	-0.061	-0.057	-0.069	-0.061	-0.056	-0.099	-0.091	-0.086	-0.052	-0.044	-0.038
5.08	.822	-0.125	-0.121	-0.116	-0.126	-0.114	-0.140	-0.174	-0.166	-0.171	-0.129	-0.123	-0.121
3.94	.852	-0.147	-0.148	-0.146	-0.176	-0.178	-0.176	-0.262	-0.266	-0.263	-0.215	-0.219	-0.215
2.80	.902	-0.109	-0.113	-0.125	-0.122	-0.127	-0.111	-0.302	-0.308	-0.305	-0.261	-0.221	-0.209
1.65	.942	-0.058	-0.058	-0.041	-0.051	-0.052	-0.057	-0.087	-0.103	-0.129	-0.276	-0.274	-0.260
1.08	.962	.012	.009	.005	.025	.026	.016	.068	.068	.057	.197	.215	.236
.51	.982	.067	.063	.060	.055	.050	.076	.123	.120	.118	.058	.053	.055
.25	.992	.098	.095	.095	.119	.115	.115	.158	.156	.154	.075	.086	.084
.11	.996	.113	.113	.108	.150	.150	.128	.144	.145	.141	.085	.079	.077
		$P_{t,j}/P_a = 1.99$			$P_{t,j}/P_a = 1.99$			$P_{t,j}/P_a = 2.00$			$P_{t,j}/P_a = 2.01$		
7.95	.722	-0.040	-0.025	-0.003	-0.036	-0.020	.004	-0.153	-0.131	-0.100	-0.077	-0.051	-0.030
7.36	.742	-0.037	-0.026	-0.012	-0.035	-0.025	-0.008	-0.120	-0.108	-0.093	-0.055	-0.043	-0.026
6.22	.752	-0.056	-0.056	-0.052	-0.069	-0.059	-0.056	-0.103	-0.094	-0.090	-0.053	-0.043	-0.040
5.08	.822	-0.125	-0.119	-0.116	-0.147	-0.143	-0.139	-0.176	-0.177	-0.175	-0.123	-0.119	-0.117
3.94	.852	-0.159	-0.151	-0.140	-0.173	-0.174	-0.172	-0.265	-0.268	-0.265	-0.207	-0.210	-0.208
2.80	.902	-0.103	-0.103	-0.104	-0.118	-0.115	-0.120	-0.214	-0.209	-0.208	-0.161	-0.163	-0.160
1.65	.942	-0.026	-0.023	-0.026	-0.019	-0.019	-0.024	-0.047	-0.053	-0.068	-0.268	-0.267	-0.269
1.08	.962	.026	.026	.026	.042	.039	.035	.065	.076	.075	.203	.216	.212
.51	.982	.086	.082	.079	.104	.102	.099	.159	.156	.154	.082	.082	.084
.25	.992	.117	.114	.112	.140	.139	.122	.154	.152	.152	.082	.099	.099
.11	.996	.138	.135	.121	.154	.146	.148	.159	.159	.152	.075	.073	.075
		$P_{t,j}/P_a = 5.00$			$P_{t,j}/P_a = 5.99$			$P_{t,j}/P_a = 6.08$			$P_{t,j}/P_a = 6.17$		
7.95	.722				-0.034	-0.019	.002	-0.154	-0.130	-0.099	-0.075	-0.049	-0.018
7.36	.742				-0.035	-0.026	-0.007	-0.119	-0.105	-0.091	-0.054	-0.041	-0.022
6.22	.752				-0.067	-0.058	-0.033	-0.101	-0.095	-0.085	-0.051	-0.042	-0.037
5.08	.822				-0.171	-0.145	-0.137	-0.178	-0.177	-0.173	-0.123	-0.118	-0.114
3.94	.852				-0.171	-0.172	-0.172	-0.265	-0.268	-0.265	-0.206	-0.210	-0.207
2.80	.902				-0.117	-0.112	-0.119	-0.119	-0.115	-0.109	-0.090	-0.085	-0.080
1.65	.942				-0.017	-0.017	-0.023	-0.080	-0.080	-0.080	-0.059	-0.059	-0.058
1.08	.962				.034	.039	.036	.065	.065	.065	.123	.123	.121
.51	.982				.068	.065	.062	.093	.093	.093	.151	.151	.147
.25	.992				.104	.104	.105	.152	.151	.151	.154	.154	.152
.11	.996				.150	.149	.149	.151	.151	.151	.153	.153	.151
		$P_{t,j}/P_a = 3.29$ (max.)											
7.95	.722							-0.152	-0.126	-0.097			
7.36	.742							-0.119	-0.107	-0.090			
6.22	.752							-0.100	-0.092	-0.088			
5.08	.822							-0.173	-0.173	-0.172			
3.94	.852							-0.265	-0.265	-0.262			
2.80	.902							-0.112	-0.101	-0.096			
1.65	.942							-0.089	-0.086	-0.084			
1.08	.962							.059	.059	.059			
.51	.982							.124	.124	.124			
.25	.992							.151	.151	.151			
.11	.996							.153	.153	.153			

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TABLE III.- AFTERBODY PRESSURE COEFFICIENTS - Continued

(e) Afterbody IV - Continued

 $T_3 = 500^{\circ} F$ 

$\frac{x}{d_J}$	$\frac{x}{r_{max}}$	Pressure coefficients for -											
		$M_\infty = 0.80$			$M_\infty = 0.90$			$M_\infty = 1.00$			$M_\infty = 1.10$		
		$\theta = 0^{\circ}$	$\theta = 45^{\circ}$	$\theta = 72^{\circ}$	$\theta = 0^{\circ}$	$\theta = 45^{\circ}$	$\theta = 72^{\circ}$	$\theta = 0^{\circ}$	$\theta = 45^{\circ}$	$\theta = 72^{\circ}$	$\theta = 0^{\circ}$	$\theta = 45^{\circ}$	$\theta = 72^{\circ}$
		$P_{t,J}/P_\infty = 1.99$			$P_{t,J}/P_\infty = 1.97$			$P_{t,J}/P_\infty = 1.95$			$P_{t,J}/P_\infty = 2.01$		
7.95	.722	-.030	-.006	-.003	-.036	-.002	.003	-.158	-.130	-.099	-.073	-.052	-.021
7.36	.762	-.038	-.039	-.013	-.034	-.029	-.008	-.181	-.110	-.059	-.052	-.045	-.026
6.22	.782	-.057	-.057	-.052	-.057	-.059	-.004	-.106	-.059	-.050	-.054	-.047	-.035
5.08	.822	-.129	-.120	-.115	-.114	-.111	-.156	-.177	-.176	-.178	-.123	-.122	-.118
3.94	.862	-.114	-.114	-.139	-.170	-.171	-.169	-.263	-.267	-.263	-.207	-.211	-.207
2.80	.902	-.105	-.100	-.108	-.115	-.115	-.117	-.211	-.204	-.206	-.248	-.245	-.246
1.65	.942	-.083	-.021	-.027	-.013	-.016	-.021	-.044	-.054	-.058	-.266	-.265	-.269
1.08	.962	.030	.030	.026	.035	.035	.039	.088	.079	.076	-.153	-.172	-.194
.51	.982	.091	.089	.086	.115	.108	.106	.136	.134	.134	.046	.056	.053
.23	.998	.124	.122	.122	.149	.143	.145	.189	.181	.182	.079	.073	.077
.11	.996	.137	.134	.133	.160	.158	.156	.197	.198	.196	.057	.068	.068
		$P_{t,J}/P_\infty = 2.98$			$P_{t,J}/P_\infty = 2.96$			$P_{t,J}/P_\infty = 2.99$			$P_{t,J}/P_\infty = 3.00$		
7.95	.722	-.039	-.025	-.005	-.036	-.021	.003	-.150	-.121	-.096	-.080	-.063	-.021
7.36	.762	-.038	-.028	-.012	-.035	-.029	-.007	-.116	-.109	-.088	-.094	-.085	-.028
6.22	.782	-.065	-.056	-.022	-.060	-.059	-.026	-.146	-.142	-.140	-.146	-.145	-.117
5.08	.822	-.122	-.114	-.115	-.116	-.112	-.125	-.172	-.172	-.169	-.140	-.121	-.117
3.94	.862	-.124	-.110	-.139	-.117	-.117	-.129	-.205	-.205	-.205	-.207	-.211	-.207
2.80	.902	-.102	-.100	-.102	-.116	-.115	-.117	-.305	-.304	-.302	-.249	-.246	-.249
1.65	.942	-.023	-.023	-.027	-.016	-.018	-.023	-.061	-.071	-.071	-.266	-.269	-.269
1.08	.962	.029	.027	.025	.044	.042	.037	.076	.074	.071	-.176	-.195	-.214
.51	.982	.091	.097	.085	.110	.108	.104	.135	.133	.133	.029	.029	.026
.23	.998	.122	.119	.119	.144	.141	.141	.181	.182	.181	.070	.067	.068
.11	.996	.138	.131	.130	.156	.155	.156	.198	.199	.199	.079	.078	.080
		$P_{t,J}/P_\infty = 4.99$			$P_{t,J}/P_\infty = 4.99$			$P_{t,J}/P_\infty = 4.99$			$P_{t,J}/P_\infty = 4.99$		
7.95	.722							-.145	-.122	-.093	-.080	-.052	-.020
7.36	.762							-.110	-.099	-.083	-.059	-.046	-.020
6.22	.782							-.091	-.084	-.081	-.054	-.047	-.018
5.08	.822							-.171	-.169	-.168	-.126	-.121	-.117
3.94	.862							-.207	-.208	-.203	-.206	-.209	-.207
2.80	.902							-.300	-.293	-.288	-.246	-.245	-.246
1.65	.942							-.075	-.074	-.069	-.069	-.068	-.068
1.08	.962							-.076	-.071	-.069	-.167	-.167	-.169
.51	.982							-.126	-.133	-.135	-.120	-.126	-.126
.23	.998							-.144	-.134	-.136	-.080	-.076	-.079
.11	.996							-.160	-.161	-.163	-.088	-.087	-.089

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TABLE III.- AFTERBODY PRESSURE COEFFICIENTS - Continued

(e) Afterbody IV-- Concluded

 $t_1 = 1,200^{\circ} F$ 

$\frac{x}{L_{MAX}}$	$\frac{x}{L}$	Pressure coefficients for -											
		$M_\infty = 0.80$			$M_\infty = 0.90$			$M_\infty = 1.00$			$M_\infty = 1.10$		
		$\theta = 0^\circ$	$\theta = 45^\circ$	$\theta = 72^\circ$	$\theta = 0^\circ$	$\theta = 45^\circ$	$\theta = 72^\circ$	$\theta = 0^\circ$	$\theta = 45^\circ$	$\theta = 72^\circ$	$\theta = 0^\circ$	$\theta = 45^\circ$	$\theta = 72^\circ$
		$P_{t,i}/P_\infty = 1.99$			$P_{t,i}/P_\infty = 1.99$			$P_{t,i}/P_\infty = 2.01$			$P_{t,i}/P_\infty = 2.01$		
7.93	.722	-0.059	-0.023	-0.003	-0.055	-0.027	.006	-0.152	-0.126	-0.098	-0.053	-0.029	-0.003
7.36	.742	-0.051	-0.026	-0.010	-0.051	-0.021	-0.003	-0.117	-0.107	-0.093	-0.062	-0.048	-0.008
6.22	.762	-0.055	-0.027	-0.013	-0.056	-0.027	-0.003	-0.100	-0.092	-0.090	-0.059	-0.060	-0.013
5.08	.782	-0.058	-0.028	-0.016	-0.058	-0.028	-0.003	-0.093	-0.083	-0.080	-0.059	-0.060	-0.012
3.94	.802	-0.062	-0.030	-0.018	-0.062	-0.030	-0.003	-0.086	-0.076	-0.073	-0.053	-0.054	-0.011
2.80	.822	-0.065	-0.032	-0.020	-0.065	-0.032	-0.003	-0.079	-0.069	-0.066	-0.043	-0.044	-0.010
1.66	.842	-0.068	-0.034	-0.022	-0.068	-0.034	-0.003	-0.072	-0.062	-0.059	-0.033	-0.034	-0.009
.52	.862	-0.071	-0.036	-0.024	-0.071	-0.036	-0.003	-0.065	-0.055	-0.052	-0.029	-0.030	-0.008
.31	.882	-0.073	-0.038	-0.026	-0.073	-0.038	-0.003	-0.058	-0.048	-0.045	-0.026	-0.027	-0.007
.23	.892	-0.074	-0.039	-0.027	-0.074	-0.039	-0.003	-0.057	-0.047	-0.044	-0.025	-0.026	-0.007
.11	.906	-0.074	-0.039	-0.028	-0.074	-0.039	-0.003	-0.056	-0.046	-0.043	-0.024	-0.025	-0.007
		$P_{t,i}/P_\infty = 3.00$			$P_{t,i}/P_\infty = 2.95$			$P_{t,i}/P_\infty = 3.00$			$P_{t,i}/P_\infty = 3.04$		
7.93	.722	-0.056	-0.025	-0.003	-0.056	-0.025	.003	-0.152	-0.128	-0.097	-0.052	-0.028	-0.003
7.36	.742	-0.058	-0.026	-0.012	-0.058	-0.026	-0.003	-0.117	-0.107	-0.095	-0.062	-0.047	-0.007
6.22	.762	-0.064	-0.026	-0.013	-0.067	-0.028	-0.003	-0.100	-0.095	-0.091	-0.056	-0.049	-0.013
5.08	.782	-0.066	-0.028	-0.015	-0.067	-0.028	-0.003	-0.093	-0.083	-0.080	-0.053	-0.054	-0.012
3.94	.802	-0.070	-0.030	-0.017	-0.070	-0.031	-0.003	-0.086	-0.076	-0.073	-0.053	-0.054	-0.011
2.80	.822	-0.073	-0.032	-0.018	-0.073	-0.032	-0.003	-0.079	-0.069	-0.066	-0.043	-0.044	-0.010
1.66	.842	-0.075	-0.034	-0.020	-0.075	-0.034	-0.003	-0.072	-0.062	-0.059	-0.033	-0.034	-0.009
.52	.862	-0.076	-0.035	-0.021	-0.076	-0.035	-0.003	-0.065	-0.055	-0.052	-0.033	-0.034	-0.008
.31	.882	-0.076	-0.036	-0.022	-0.076	-0.036	-0.003	-0.058	-0.048	-0.045	-0.026	-0.027	-0.007
.23	.892	-0.076	-0.037	-0.023	-0.076	-0.037	-0.003	-0.057	-0.047	-0.044	-0.025	-0.026	-0.007
.11	.906	-0.076	-0.037	-0.024	-0.076	-0.037	-0.003	-0.056	-0.046	-0.043	-0.024	-0.025	-0.007
		$P_{t,i}/P_\infty = 5.05$			$P_{t,i}/P_\infty = 4.99$			$P_{t,i}/P_\infty = 5.01$					
7.93	.722				-0.055	-0.017	.007	-0.151	-0.127	-0.095	-0.058	-0.030	-0.003
7.36	.742				-0.051	-0.002	.004	-0.117	-0.105	-0.092	-0.059	-0.034	-0.004
6.22	.762				-0.057	-0.007	.002	-0.099	-0.094	-0.087	-0.053	-0.036	-0.005
5.08	.782				-0.053	-0.003	.006	-0.117	-0.114	-0.103	-0.069	-0.040	-0.017
3.94	.802				-0.058	-0.008	.005	-0.125	-0.122	-0.110	-0.076	-0.046	-0.020
2.80	.822				-0.062	-0.013	.007	-0.117	-0.114	-0.103	-0.078	-0.048	-0.023
1.66	.842				-0.065	-0.017	.010	-0.120	-0.117	-0.106	-0.082	-0.052	-0.026
.52	.862				-0.068	-0.020	.013	-0.116	-0.113	-0.102	-0.078	-0.053	-0.027
.31	.882				-0.069	-0.021	.014	-0.115	-0.112	-0.101	-0.079	-0.054	-0.028
.23	.892				-0.069	-0.021	.014	-0.115	-0.112	-0.101	-0.079	-0.054	-0.028
.11	.906				-0.069	-0.021	.014	-0.115	-0.112	-0.101	-0.079	-0.054	-0.028

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TABLE III.- AFTERBODY PRESSURE COEFFICIENTS - Continued

(f) Afterbody V

 $t_j = \text{Cold}$ 

$\frac{k}{k_0}$	$\frac{k}{l_{\max}}$	Pressure coefficients for -											
		$M_\infty = 0.80$			$M_\infty = 0.90$			$M_\infty = 1.00$			$M_\infty = 1.10$		
		$\theta = 0^\circ$	$\theta = 45^\circ$	$\theta = 72^\circ$	$\theta = 0^\circ$	$\theta = 45^\circ$	$\theta = 72^\circ$	$\theta = 0^\circ$	$\theta = 45^\circ$	$\theta = 72^\circ$	$\theta = 0^\circ$	$\theta = 45^\circ$	$\theta = 72^\circ$
		$P_{t,j}/P_\infty = 1.08$			$P_{t,j}/P_\infty = 1.10$			$P_{t,j}/P_\infty = 1.09$			$P_{t,j}/P_\infty = 1.01$		
7.95	.722	-.039	-.025	-.005	-.034	-.017	.005	-.153	-.131	-.100	-.078	-.055	-.032
7.36	.742	-.057	-.026	-.006	-.033	-.020	.005	-.116	-.109	-.080	-.055	-.040	-.026
6.22	.782	-.049	-.025	-.004	-.025	-.014	.005	-.100	-.095	-.066	-.046	-.031	-.020
5.08	.822	-.039	-.021	-.003	-.026	-.013	.005	-.103	-.105	-.082	-.070	-.059	-.046
3.94	.862	-.151	-.147	-.141	-.176	-.172	-.157	-.117	-.115	-.105	-.103	-.094	-.081
2.80	.902	-.156	-.152	-.149	-.176	-.172	-.165	-.111	-.108	-.100	-.103	-.097	-.081
1.65	.942	-.148	-.143	-.139	-.177	-.172	-.168	-.103	-.100	-.093	-.097	-.090	-.082
1.08	.982	-.038	-.042	-.031	-.017	-.023	-.031	-.003	-.010	-.007	-.007	-.006	-.008
.51	.982	.073	.076	.069	.105	.108	.092	.039	.039	.031	.032	.031	.027
.23	.992	.134	.153	.187	.150	.149	.166	.058	.058	.049	.042	.042	.033
.11	.996	.139	.155	.190	.166	.166	.163	.057	.057	.056	.049	.049	.046
		$P_{t,j}/P_\infty = 2.01$			$P_{t,j}/P_\infty = 1.99$			$P_{t,j}/P_\infty = 2.00$			$P_{t,j}/P_\infty = 2.03$		
7.95	.722	-.035	-.023	.000	-.032	-.014	.008	-.153	-.129	-.098	-.079	-.059	-.035
7.36	.742	-.034	-.024	.002	-.025	-.018	.006	-.116	-.105	-.076	-.055	-.040	-.027
6.22	.782	-.046	-.042	.031	-.042	-.040	-.027	-.097	-.095	-.066	-.066	-.052	-.041
5.08	.822	-.082	-.077	.075	-.086	-.084	-.082	-.102	-.100	-.101	-.072	-.066	-.062
3.94	.862	-.145	-.140	-.136	-.171	-.167	-.161	-.114	-.115	-.114	-.124	-.117	-.110
2.80	.902	-.151	-.151	-.148	-.176	-.172	-.165	-.109	-.107	-.103	-.103	-.103	-.100
1.65	.942	-.148	-.144	-.141	-.176	-.172	-.168	-.110	-.108	-.103	-.103	-.103	-.100
1.08	.982	-.020	-.026	.005	-.020	-.011	-.012	-.012	-.013	-.011	.017	.017	.019
.51	.982	.094	.091	.083	.124	.117	.111	.058	.059	.049	.059	.056	.049
.23	.992	.146	.144	.142	.167	.165	.162	.060	.059	.060	.037	.032	.033
.11	.996	.156	.164	.169	.179	.176	.175	.063	.063	.063	.013	.018	.018
		$P_{t,j}/P_\infty = 2.79$ (max.)			$P_{t,j}/P_\infty = 3.00$			$P_{t,j}/P_\infty = 2.99$			$P_{t,j}/P_\infty = 3.00$		
7.95	.722	-.134	-.082	.000	-.035	-.016	.007	-.153	-.189	-.078	-.077	-.058	-.021
7.36	.742	-.054	-.026	.001	-.030	-.019	.007	-.116	-.103	-.076	-.053	-.039	-.004
6.22	.782	-.048	-.041	.038	-.044	-.040	-.030	-.097	-.098	-.068	-.054	-.050	-.046
5.08	.822	-.085	-.077	.073	-.089	-.085	-.083	-.103	-.102	-.100	-.069	-.066	-.054
3.94	.862	-.144	-.141	-.136	-.172	-.170	-.165	-.108	-.109	-.105	-.146	-.147	-.139
2.80	.902	-.148	-.148	-.142	-.174	-.170	-.165	-.109	-.109	-.104	-.142	-.140	-.138
1.65	.942	-.118	-.113	-.119	-.174	-.170	-.165	-.121	-.120	-.116	-.155	-.157	-.151
1.08	.982	-.021	-.026	.004	-.020	-.016	-.016	-.008	-.008	-.007	-.027	-.025	-.027
.51	.982	.145	.148	.143	.168	.158	.160	.107	.107	.108	.049	.044	-.020
.23	.992	.144	.145	.138	.169	.162	.177	.174	.173	.171	.051	.051	.051
.11	.996	.164	.164	.164	.177	.174	.174	.173	.173	.173	.057	.018	.023

CONT'D. ON BACK



TABLE III.- AFTERBODY PRESSURE COEFFICIENTS - Continued

(f) Afterbody V - Concluded

 $t_3 = 1,200^{\circ}$  F

$\frac{x}{d_3}$	$\frac{x}{l_{\max}}$	Pressure coefficients for -											
		M <sub>a</sub> = 0.80			M <sub>a</sub> = 0.90			M <sub>a</sub> = 1.00			M <sub>a</sub> = 1.10		
		$\theta = 0^{\circ}$	$\theta = 45^{\circ}$	$\theta = 72^{\circ}$	$\theta = 0^{\circ}$	$\theta = 45^{\circ}$	$\theta = 72^{\circ}$	$\theta = 0^{\circ}$	$\theta = 45^{\circ}$	$\theta = 72^{\circ}$	$\theta = 0^{\circ}$	$\theta = 45^{\circ}$	$\theta = 72^{\circ}$
		$P_{t,i}/P_a = 1.99$			$P_{t,i}/P_a = 1.99$			$P_{t,i}/P_a = 2.00$			$P_{t,i}/P_a = 1.99$		
7.93	.722	-.033	-.019	.002	-.029	-.014	.009	-.152	-.130	-.099	-.076	-.050	-.018
7.36	.742	-.031	-.021	.001	-.026	-.016	.006	-.118	-.104	-.062	-.052	-.038	-.009
6.22	.762	-.044	-.039	.030	-.040	-.036	.020	-.097	-.093	-.064	-.092	-.069	-.037
5.08	.782	-.079	-.073	-.073	-.084	-.080	-.078	-.103	-.108	-.102	-.067	-.063	-.061
3.94	.802	-.114	-.108	-.108	-.123	-.118	-.115	-.194	-.191	-.183	-.148	-.144	-.131
2.80	.822	-.128	-.122	-.122	-.130	-.125	-.122	-.200	-.195	-.186	-.154	-.151	-.141
1.65	.842	-.103	-.103	-.103	-.102	-.102	-.102	-.161	-.155	-.155	-.137	-.135	-.136
1.08	.862	-.099	-.091	-.091	-.103	-.099	-.091	-.022	.007	.002	-.156	-.157	-.156
.51	.882	.110	.105	.099	.135	.130	.124	.064	.039	.041	-.036	-.037	-.037
.23	.902	.165	.162	.158	.178	.176	.171	.092	.089	.092	-.009	-.014	-.013
.11	.922	.180	.179	.178	.183	.184	.185	.053	.053	.053	-.007	-.010	-.006
		$P_{t,i}/P_a = 3.01$			$P_{t,i}/P_a = 3.08$			$P_{t,i}/P_a = 3.00$			$P_{t,i}/P_a = 3.08$		
7.93	.722	-.036	-.021	.000	-.050	-.014	.009	-.152	-.131	-.100	-.076	-.049	-.018
7.36	.742	-.032	-.023	.005	-.027	-.016	.006	-.118	-.109	-.082	-.052	-.037	-.009
6.22	.762	-.046	-.041	.031	-.051	-.037	-.027	-.097	-.095	-.085	-.050	-.047	-.036
5.08	.782	-.081	-.077	-.076	-.084	-.081	-.079	-.164	-.165	-.162	-.162	-.162	-.160
3.94	.802	-.144	-.140	-.139	-.169	-.165	-.159	-.194	-.191	-.184	-.146	-.145	-.136
2.80	.822	-.189	-.179	-.180	-.229	-.222	-.224	-.311	-.306	-.305	-.240	-.237	-.237
1.65	.842	-.106	-.105	-.113	-.103	-.103	-.112	-.159	-.201	-.197	-.336	-.333	-.334
1.08	.862	-.012	-.016	-.020	.015	.007	.003	.022	.007	.005	-.189	-.189	-.189
.51	.882	.105	.103	.096	.135	.129	.122	.044	.039	.042	-.025	-.025	-.025
.23	.902	.160	.158	.154	.175	.173	.171	.091	.089	.093	-.014	-.013	-.013
.11	.922	.177	.176	.173	.184	.184	.185	.034	.033	.060	-.013	-.017	-.013
		$P_{t,i}/P_a = 4.53$ (max.)			$P_{t,i}/P_a = 5.01$			$P_{t,i}/P_a = 4.97$			$P_{t,i}/P_a = 4.99$		
7.93	.722	-.036	-.022	.001	-.031	-.013	.008	-.153	-.130	-.100	-.077	-.050	-.019
7.36	.742	-.033	-.023	.003	-.038	-.017	.004	-.118	-.109	-.082	-.054	-.038	-.010
6.22	.762	-.046	-.042	.028	-.042	-.038	-.028	-.098	-.093	-.083	-.052	-.049	-.029
5.08	.782	-.080	-.078	-.076	-.085	-.082	-.080	-.164	-.163	-.161	-.161	-.160	-.158
3.94	.802	-.141	-.140	-.139	-.168	-.165	-.158	-.195	-.190	-.188	-.147	-.146	-.138
2.80	.822	-.188	-.178	-.179	-.213	-.207	-.202	-.293	-.292	-.291	-.246	-.237	-.237
1.65	.842	-.103	-.102	-.102	-.103	-.102	-.102	-.153	-.152	-.151	-.151	-.150	-.148
1.08	.862	-.003	-.008	-.015	.024	.018	.009	.080	.007	.008	-.209	-.208	-.208
.51	.882	.117	.114	.109	.144	.141	.136	.066	.061	.064	-.026	-.025	-.025
.23	.902	.169	.168	.169	.182	.181	.181	.055	.052	.056	-.014	-.010	-.010
.11	.922	.189	.189	.189	.198	.192	.193	.059	.058	.064	-.011	-.015	-.014

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TABLE III.- AFTERBODY PRESSURE COEFFICIENTS - Continued

(g) Afterbody VI

 $t_1 = \text{Cold}$ 

$\frac{x}{d_j}$	$\frac{x}{L_{\infty}}$	Pressure coefficients for -											
		M <sub>∞</sub> = 0.80			M <sub>∞</sub> = 0.90			M <sub>∞</sub> = 1.00			M <sub>∞</sub> = 1.10		
		s = 0°	s = 45°	s = 72°	s = 0°	s = 45°	s = 72°	s = 0°	s = 45°	s = 72°	s = 0°	s = 45°	s = 72°
		$P_{t,j}/P_{\infty} = 1.05$			$P_{t,j}/P_{\infty} = 1.01$			$P_{t,j}/P_{\infty} = 0.90$			$P_{t,j}/P_{\infty} = 0.87$		
7.95	.722	-.030	-.018	.005	-.025	-.010	.001	-.151	-.189	-.100	-.076	-.082	.002
7.36	.742	-.025	-.016	-.001	-.019	-.006	.007	-.119	-.107	-.097	-.051	-.043	-.030
6.22	.762	-.027	-.024	-.015	-.019	-.016	-.007	-.067	-.065	-.075	-.060	-.047	-.035
5.05	.822	-.028	-.026	-.028	-.028	-.028	-.020	-.071	-.072	-.068	-.052	-.053	-.042
3.94	.862	-.062	-.061	-.060	-.055	-.054	-.054	-.066	-.065	-.065	-.054	-.055	-.056
2.80	.902	-.152	-.158	-.150	-.155	-.157	-.156	-.125	-.120	-.130	-.086	-.092	-.093
1.69	.942	-.331	-.329	-.349	-.453	-.448	-.457	-.383	-.376	-.383	-.299	-.306	-.309
1.06	.962	-.239	-.238	-.250	-.153	-.172	-.190	-.173	-.156	-.157	-.127	-.143	-.149
.51	.982	.036	.034	.040	.003	.000	.007	.058	.067	.061	-.123	-.123	-.123
.25	.992	.043	.042	.043	.007	.008	.012	.083	.088	.084	-.124	-.123	-.123
.11	.995	.045	.044	.045	.008	.009	.012	.086	.084	.084	-.124	-.127	-.125
		$P_{t,j}/P_{\infty} = 1.96$			$P_{t,j}/P_{\infty} = 1.98$			$P_{t,j}/P_{\infty} = 2.00$			$P_{t,j}/P_{\infty} = 2.02$		
7.95	.722	-.050	-.017	.004	-.022	-.009	.014	-.152	-.151	-.099	-.076	-.082	-.022
7.36	.742	-.047	-.018	-.002	-.019	-.013	.007	-.120	-.109	-.099	-.055	-.059	-.059
6.22	.762	-.047	-.024	-.013	-.019	-.013	-.009	-.060	-.065	-.076	-.051	-.048	-.045
5.05	.822	-.063	-.059	-.063	-.053	-.053	-.047	-.065	-.065	-.065	-.043	-.043	-.042
3.94	.862	-.152	-.158	-.149	-.152	-.148	-.145	-.128	-.120	-.130	-.089	-.098	-.093
2.80	.902	-.321	-.321	-.328	-.442	-.440	-.450	-.383	-.378	-.383	-.302	-.305	-.300
1.69	.942	-.216	-.224	-.226	-.109	-.103	-.104	-.110	-.112	-.112	-.161	-.167	-.165
1.06	.962	-.202	-.204	-.206	.026	.012	.003	-.084	-.067	-.073	-.159	-.162	-.157
.51	.982	.050	.056	.050	.026	.012	.000	-.059	-.073	-.081	-.164	-.167	-.162
.25	.992	.046	.036	.051	.019	.007	.000	-.061	-.073	-.081	-.164	-.167	-.162
.11	.995	.038	.031	.029	.016	.004	-.002	-.061	-.073	-.081	-.164	-.167	-.162
		$P_{t,j}/P_{\infty} = 2.66$ (max.)			$P_{t,j}/P_{\infty} = 2.87$ (max.)			$P_{t,j}/P_{\infty} = 3.01$			$P_{t,j}/P_{\infty} = 3.01$		
7.95	.722	-.028	-.015	.004	-.023	-.010	.013	-.153	-.131	-.102	-.078	-.052	-.022
7.36	.742	-.025	-.018	-.000	-.019	-.008	.007	-.120	-.108	-.097	-.056	-.041	-.026
6.22	.762	-.028	-.024	-.014	-.021	-.017	-.006	-.060	-.067	-.070	-.050	-.046	-.035
5.05	.822	-.062	-.059	-.063	-.059	-.057	-.052	-.064	-.073	-.065	-.052	-.054	-.042
3.94	.862	-.152	-.158	-.157	-.157	-.157	-.154	-.125	-.127	-.129	-.066	-.068	-.067
2.80	.902	-.321	-.321	-.328	-.445	-.446	-.448	-.383	-.376	-.383	-.301	-.303	-.303
1.69	.942	-.216	-.224	-.226	-.122	-.120	-.120	-.135	-.131	-.129	-.192	-.198	-.198
1.06	.962	-.202	-.204	-.206	.018	.008	-.004	-.079	-.092	-.094	-.189	-.191	-.192
.51	.982	.046	.044	.030	.005	.006	-.006	-.012	-.022	-.020	-.197	-.198	-.198
.25	.992	.038	.028	.027	.005	-.005	-.012	-.020	-.020	-.100	-.156	-.156	-.159
.11	.995	.027	.028	.028	-.005	-.005	-.012	-.020	-.020	-.100	-.156	-.156	-.159

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TABLE III.- AFTERBODY PRESSURE COEFFICIENTS - Continued

(a) Afterbody VI - Continued

 $t_3 = 8000^{\circ} F$ 

$\frac{X}{L_3}$	$\frac{X}{L_{MAX}}$	Pressure coefficients for -												
		M <sub>∞</sub> = 0.80			M <sub>∞</sub> = 0.90			M <sub>∞</sub> = 1.00			M <sub>∞</sub> = 1.10			
		$\theta = 0^\circ$	$\theta = 45^\circ$	$\theta = 72^\circ$	$\theta = 0^\circ$	$\theta = 45^\circ$	$\theta = 72^\circ$	$\theta = 0^\circ$	$\theta = 45^\circ$	$\theta = 72^\circ$	$\theta = 0^\circ$	$\theta = 45^\circ$	$\theta = 72^\circ$	
		$P_{t_3}/P_\infty = 2.00$			$P_{t_3}/P_\infty = 2.00$			$P_{t_3}/P_\infty = 2.01$			$P_{t_3}/P_\infty = 2.00$			
7.95	0.722	-0.051	-0.026	0.005	-0.026	-0.030	0.012	-0.152	-0.130	-0.102	-0.082	-0.054	-0.034	
7.36	.712	-0.026	-0.016	-0.000	-0.020	-0.010	.007	-0.119	-0.110	-0.098	-0.061	-0.044	-0.032	
6.22	.702	-0.029	-0.018	-0.014	-0.021	-0.017	.006	-0.089	-0.086	-0.076	-0.053	-0.041	-0.036	
5.08	.692	-0.031	-0.016	-0.016	-0.030	-0.029	.003	-0.075	-0.073	-0.067	-0.056	-0.043	-0.035	
5.94	.682	-0.060	-0.058	-0.057	-0.057	-0.054	.004	-0.067	-0.067	-0.067	-0.056	-0.044	-0.037	
2.80	.902	-0.145	-0.149	-0.148	-0.125	-0.127	-0.125	-0.127	-0.133	-0.131	-0.096	-0.088	-0.079	
1.65	.942	-0.309	-0.333	-0.322	-0.441	-0.441	-0.400	-0.381	-0.373	-0.362	-0.303	-0.298	-0.281	
1.08	.952	-0.181	-0.210	-0.207	-0.058	-0.149	-0.193	-0.100	-0.107	-0.101	-0.132	-0.120	-0.116	
.51	.952	.097	.034	.029	.026	.004	.001	.053	.061	.063	.189	.153	.136	
.23	.952	.049	.034	.031	.017	.001	.001	.059	.054	.056	.161	.153	.137	
.11	.950	.048	.035	.032	.019	.000	.003	.051	.054	.057	.142	.138	.137	
		$P_{t_3}/P_\infty = 2.98$			$P_{t_3}/P_\infty = 5.01$			$P_{t_3}/P_\infty = 2.99$			$P_{t_3}/P_\infty = 5.01$			
7.95	.722	-0.063	-0.015	.006	-0.025	-0.009	.013	-0.151	-0.129	-0.099	-0.081	-0.075	-0.060	
7.36	.712	-0.026	-0.018	-0.001	-0.019	-0.006	.008	-0.118	-0.107	-0.097	-0.069	-0.047	-0.038	
6.22	.702	-0.024	-0.019	-0.013	-0.021	-0.009	.005	-0.088	-0.084	-0.076	-0.056	-0.041	-0.036	
5.08	.692	-0.025	-0.018	-0.027	-0.026	-0.027	.018	-0.071	-0.072	-0.064	-0.057	-0.046	-0.036	
5.94	.682	-0.050	-0.053	-0.059	-0.053	-0.051	.011	-0.065	-0.064	-0.063	-0.056	-0.048	-0.040	
2.80	.902	-0.147	-0.149	-0.148	-0.125	-0.124	-0.125	-0.126	-0.128	-0.130	-0.090	-0.084	-0.074	
1.65	.942	-0.312	-0.319	-0.321	-0.441	-0.441	-0.449	-0.380	-0.375	-0.379	-0.303	-0.298	-0.293	
1.08	.952	-0.191	-0.227	-0.227	-0.101	-0.132	-0.197	-0.116	-0.129	-0.126	-0.175	-0.163	-0.159	
.51	.952	.053	.029	.020	.024	.003	.008	.064	.065	.065	.152	.157	.156	
.23	.952	.043	.028	.025	.014	.005	.006	.077	.067	.069	.160	.174	.174	
.11	.950	.042	.027	.025	.014	.004	.006	.078	.057	.059	.154	.173	.174	
		$P_{t_3}/P_\infty = 4.31$ (max.)			$P_{t_3}/P_\infty = 4.88$ (max.)			$P_{t_3}/P_\infty = 4.96$			$P_{t_3}/P_\infty = 4.96$			
7.95	.722				-.025	-.010	.014	-.147	-.126	-.098	-.085	-.076	-.065	
7.36	.712				-.020	-.007	.007	-.115	-.103	-.093	-.062	-.047	-.034	
6.22	.702				-.020	-.016	.006	-.085	-.080	-.071	-.056	-.042	-.030	
5.08	.692				-.029	-.027	-.020	-.057	-.057	-.059	-.026	-.016	-.013	
5.94	.682				-.024	-.023	-.023	-.062	-.061	-.062	-.041	-.033	-.023	
2.80	.902				-.125	-.126	-.126	-.122	-.127	-.127	-.074	-.068	-.063	
1.65	.942				-.144	-.146	-.148	-.128	-.127	-.127	-.074	-.068	-.063	
1.08	.952				-.135	-.144	-.147	-.124	-.123	-.123	-.074	-.068	-.063	
.51	.952				-.080	-.002	-.008	-.085	-.107	-.115	-.128	-.116	-.116	-.116
.23	.952				-.011	-.006	-.012	-.098	-.116	-.122	-.200	-.195	-.190	-.190
.11	.950				-.010	-.009	-.010	-.094	-.117	-.122	-.200	-.195	-.190	-.190

TABLE III.- AFTERBODY PRESSURE COEFFICIENTS - Continued

(g) Afterbody VI - Concluded

 $t_j = 1,200^{\circ} F$ 

$\frac{x}{d_j}$	$\frac{x}{l_{max}}$	Pressure coefficients for -											
		M <sub>a</sub> = 0.80			M <sub>a</sub> = 0.90			M <sub>a</sub> = 1.00			M <sub>a</sub> = 1.10		
		$\theta = 0^{\circ}$	$\theta = 45^{\circ}$	$\theta = 72^{\circ}$	$\theta = 0^{\circ}$	$\theta = 45^{\circ}$	$\theta = 72^{\circ}$	$\theta = 0^{\circ}$	$\theta = 45^{\circ}$	$\theta = 72^{\circ}$	$\theta = 0^{\circ}$	$\theta = 45^{\circ}$	$\theta = 72^{\circ}$
		$P_{t,j}/P_m = 1.97$			$P_{t,j}/P_m = 1.95$			$P_{t,j}/P_m = 2.05$			$P_{t,j}/P_m = 1.97$		
7.95	.722	-.051	-.016	.005	-.025	-.009	.015	-.122	-.120	-.100	-.080	-.094	-.023
7.95	.742	-.027	-.005	-.002	-.018	-.008	.006	-.120	-.108	-.096	-.059	-.043	-.031
6.22	.762	-.028	-.004	-.003	-.019	-.013	-.006	-.089	-.086	-.074	-.054	-.049	-.037
5.08	.822	-.036	-.004	-.003	-.020	-.017	-.009	-.072	-.072	-.063	-.057	-.055	-.043
3.94	.862	-.062	-.060	-.059	-.078	-.075	-.053	-.057	-.066	-.066	-.056	-.055	-.056
2.80	.902	-.149	-.151	-.149	-.152	-.156	-.154	-.127	-.120	-.129	-.089	-.083	-.098
1.66	.942	-.312	-.314	-.314	-.441	-.438	-.447	-.381	-.376	-.384	-.304	-.300	-.301
1.08	.952	-.177	-.205	-.246	-.091	-.128	-.171	-.096	-.159	-.171	-.152	-.148	-.159
.71	.962	.071	.096	.088	.020	.018	.005	-.000	-.072	-.074	-.188	-.153	-.154
.51	.962	.058	.059	.052	.003	.003	.005	-.009	-.077	-.080	-.157	-.156	-.155
.25	.962	.049	.034	.052	.003	.007	.002	-.009	-.078	-.078	-.158	-.154	-.154
.11	.956												
		$P_{t,j}/P_m = 3.01$			$P_{t,j}/P_m = 2.97$			$P_{t,j}/P_m = 2.99$			$P_{t,j}/P_m = 2.99$		
7.95	.722	-.051	-.016	.004	-.025	-.009	.015	-.152	-.129	-.100	-.078	-.053	-.023
7.95	.742	-.028	-.015	-.001	-.019	-.008	.006	-.120	-.108	-.094	-.057	-.042	-.030
6.22	.762	-.028	-.003	-.016	-.019	-.015	-.007	-.089	-.085	-.074	-.051	-.047	-.035
5.08	.822	-.057	-.036	-.036	-.029	-.027	-.020	-.072	-.072	-.065	-.054	-.053	-.042
3.94	.862	-.060	-.060	-.059	-.078	-.075	-.052	-.054	-.058	-.055	-.056	-.056	-.053
2.80	.902	-.149	-.150	-.148	-.153	-.154	-.153	-.127	-.128	-.130	-.088	-.083	-.085
1.66	.942	-.318	-.320	-.327	-.443	-.440	-.449	-.382	-.376	-.381	-.303	-.300	-.301
1.08	.952	-.189	-.226	-.262	-.094	-.137	-.184	-.096	-.158	-.160	-.168	-.169	-.169
.71	.962	.075	.029	.082	.005	.004	-.001	-.000	-.060	-.066	-.145	-.146	-.147
.51	.962	.067	.050	.027	.015	-.002	-.005	-.072	-.092	-.091	-.160	-.171	-.172
.25	.962	.044	.030	.030	.015	-.002	-.005	-.069	-.091	-.090	-.161	-.172	-.172
.11	.956												
		$P_{t,j}/P_m = 4.51$ (max.)			$P_{t,j}/P_m = 4.55$			$P_{t,j}/P_m = 4.56$			$P_{t,j}/P_m = 4.56$		
7.95	.722	-.051	-.013	.006	-.023	-.009	.013	-.152	-.130	-.101	-.081	-.054	-.026
7.95	.742	-.027	-.012	-.001	-.018	-.007	.005	-.120	-.107	-.097	-.059	-.041	-.031
6.22	.762	-.028	-.002	-.014	-.019	-.011	-.007	-.089	-.086	-.076	-.051	-.041	-.028
5.08	.822	-.036	-.016	-.027	-.027	-.026	-.020	-.072	-.073	-.065	-.053	-.053	-.043
3.94	.862	-.061	-.058	-.059	-.053	-.053	-.053	-.065	-.066	-.065	-.057	-.055	-.058
2.80	.902	-.148	-.151	-.150	-.152	-.153	-.155	-.127	-.129	-.130	-.089	-.083	-.093
1.66	.942	-.319	-.323	-.326	-.448	-.445	-.451	-.376	-.376	-.382	-.304	-.300	-.303
1.08	.952	-.201	-.231	-.266	-.118	-.159	-.203	-.091	-.141	-.141	-.152	-.153	-.154
.71	.962	.048	.029	.020	-.020	-.001	-.005	-.080	-.108	-.112	-.183	-.194	-.195
.51	.962	.043	.029	.027	.011	-.006	-.012	-.089	-.115	-.118	-.197	-.202	-.203
.25	.962	.039	.027	.028	.011	-.010	-.010	-.089	-.116	-.118	-.198	-.204	-.203
.11	.956												

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TABLE III.- AFTERBODY PRESSURE COEFFICIENTS - Continued

(h) Afterbody VII

**t<sub>1</sub>** = Cold





TABLE III.--AFTERBODY PRESSURE COEFFICIENTS - Continued

(1) Afterbody VIII

 $t_j = \text{Cold}$ 

$\frac{x}{d_s}$	$\frac{x}{l_{\max}}$	Pressure coefficients for -											
		M <sub>a</sub> = 0.80			M <sub>a</sub> = 0.90			M <sub>a</sub> = 1.00			M <sub>a</sub> = 1.10		
		θ = 0°			θ = 45°			θ = 72°			θ = 0°		
		P <sub>t,j</sub> /P <sub>a</sub> = 1.06			P <sub>t,j</sub> /P <sub>a</sub> = 1.08			P <sub>t,j</sub> /P <sub>a</sub> = 1.14			P <sub>t,j</sub> /P <sub>a</sub> = 1.10		
12.01	.719	-0.023	-0.024	-0.012	-0.020	-0.020	-0.008	-0.103	-0.111	-0.097	-0.046	-0.058	-0.045
10.39	.727	-0.026	-0.022	-0.006	-0.024	-0.020	-0.008	-0.097	-0.094	-0.076	-0.028	-0.022	-0.043
8.76	.793	-0.053	-0.053	-0.024	-0.058	-0.059	-0.026	-0.093	-0.079	-0.072	-0.053	-0.053	-0.053
7.18	.822	-0.126	-0.133	-0.133	-0.170	-0.165	-0.165	-0.176	-0.174	-0.173	-0.126	-0.125	-0.125
5.36	.870	-0.143	-0.143	-0.140	-0.151	-0.151	-0.176	-0.222	-0.232	-0.246	-0.194	-0.195	-0.195
3.53	.908	-0.114	-0.114	-0.114	-0.134	-0.134	-0.138	-0.168	-0.166	-0.166	-0.233	-0.250	-0.251
2.33	.945	-0.033	-0.036	-0.038	-0.035	-0.038	-0.040	-0.004	-0.010	-0.010	-0.277	-0.269	-0.269
1.54	.984	.018	.015	.010	.004	.022	.018	.103	.099	.099	.096	.112	.127
.73	.985	.071	.069	.062	.062	.060	.078	.157	.155	.155	.054	.057	.043
.17	.996	.100	.110	.095	.124	.112	.110	.177	.177	.175	.067	.069	.069
		P <sub>t,j</sub> /P <sub>a</sub> = 1.98			P <sub>t,j</sub> /P <sub>a</sub> = 1.97			P <sub>t,j</sub> /P <sub>a</sub> = 1.91			P <sub>t,j</sub> /P <sub>a</sub> = 2.00		
12.01	.719	-0.024	-0.024	-0.013	-0.018	-0.019	-0.007	-0.103	-0.111	-0.096	-0.050	-0.060	-0.046
10.39	.727	-0.027	-0.023	-0.008	-0.029	-0.022	-0.007	-0.097	-0.083	-0.076	-0.039	-0.034	-0.043
8.76	.793	-0.056	-0.053	-0.053	-0.057	-0.057	-0.024	-0.093	-0.075	-0.071	-0.055	-0.057	-0.057
7.18	.822	-0.128	-0.128	-0.121	-0.157	-0.154	-0.162	-0.171	-0.175	-0.175	-0.129	-0.129	-0.129
5.36	.870	-0.144	-0.144	-0.141	-0.177	-0.177	-0.177	-0.223	-0.231	-0.231	-0.193	-0.193	-0.193
3.53	.908	-0.112	-0.112	-0.116	-0.129	-0.128	-0.135	-0.168	-0.169	-0.169	-0.207	-0.207	-0.207
2.33	.945	-0.035	-0.036	-0.037	-0.030	-0.034	-0.035	-0.006	-0.003	-0.003	-0.274	-0.266	-0.266
1.54	.984	.017	.015	.011	.028	.026	.021	.103	.103	.103	.042	.039	.036
.73	.985	.067	.063	.068	.068	.062	.078	.158	.157	.157	.073	.077	.077
.17	.996	.091	.098	.089	.113	.113	.110	.177	.177	.177	.089	.089	.090
		P <sub>t,j</sub> /P <sub>a</sub> = 2.00			P <sub>t,j</sub> /P <sub>a</sub> = 2.97			P <sub>t,j</sub> /P <sub>a</sub> = 2.90			P <sub>t,j</sub> /P <sub>a</sub> = 3.01		
12.01	.719	-0.025	-0.025	-0.024	-0.018	-0.019	-0.006	-0.103	-0.110	-0.096	-0.058	-0.068	-0.046
10.39	.727	-0.027	-0.033	-0.027	-0.029	-0.029	-0.021	-0.096	-0.083	-0.076	-0.039	-0.033	-0.044
8.76	.793	-0.064	-0.056	-0.054	-0.055	-0.057	-0.024	-0.094	-0.073	-0.071	-0.054	-0.056	-0.053
7.18	.822	-0.129	-0.136	-0.134	-0.167	-0.165	-0.161	-0.177	-0.175	-0.172	-0.130	-0.129	-0.129
5.36	.870	-0.145	-0.145	-0.142	-0.176	-0.176	-0.174	-0.223	-0.232	-0.232	-0.195	-0.195	-0.195
3.53	.908	-0.115	-0.115	-0.117	-0.147	-0.149	-0.148	-0.189	-0.196	-0.196	-0.244	-0.241	-0.241
2.33	.945	-0.037	-0.037	-0.037	-0.030	-0.037	-0.023	-0.006	-0.007	-0.007	-0.274	-0.266	-0.266
1.54	.984	.018	.018	.020	.026	.026	.021	.103	.103	.103	.044	.038	.035
.73	.985	.062	.060	.058	.081	.079	.078	.158	.158	.158	.073	.076	.073
.17	.996	.083	.084	.082	.106	.107	.105	.175	.175	.175	.077	.077	.078
		P <sub>t,j</sub> /P <sub>a</sub> = 4.99			P <sub>t,j</sub> /P <sub>a</sub> = 4.96			P <sub>t,j</sub> /P <sub>a</sub> = 4.98			P <sub>t,j</sub> /P <sub>a</sub> = 4.96		
12.01	.719	-0.022	-0.023	-0.012	-0.018	-0.018	-0.006	-0.103	-0.111	-0.096	-0.058	-0.068	-0.047
10.39	.727	-0.025	-0.031	-0.026	-0.028	-0.029	-0.023	-0.097	-0.083	-0.076	-0.050	-0.054	-0.046
8.76	.793	-0.062	-0.054	-0.052	-0.055	-0.057	-0.024	-0.094	-0.073	-0.071	-0.053	-0.057	-0.053
7.18	.822	-0.126	-0.133	-0.132	-0.166	-0.165	-0.161	-0.177	-0.175	-0.172	-0.130	-0.129	-0.129
5.36	.870	-0.142	-0.142	-0.139	-0.173	-0.173	-0.176	-0.224	-0.231	-0.231	-0.195	-0.195	-0.195
3.53	.908	-0.111	-0.110	-0.111	-0.138	-0.138	-0.132	-0.188	-0.196	-0.196	-0.244	-0.241	-0.241
2.33	.945	-0.032	-0.033	-0.036	-0.029	-0.034	-0.026	-0.006	-0.005	-0.005	-0.274	-0.266	-0.266
1.54	.984	.017	.016	.011	.027	.026	.021	.101	.098	.098	.047	.047	.047
.73	.985	.063	.062	.061	.082	.079	.078	.158	.158	.158	.073	.076	.073
.17	.996	.088	.088	.085	.107	.105	.104	.172	.172	.172	.077	.077	.078
		P <sub>t,j</sub> /P <sub>a</sub> = 6.94			P <sub>t,j</sub> /P <sub>a</sub> = 7.01								
12.01	.719							-0.103	-0.110	-0.097	-0.049	-0.059	-0.046
10.39	.727							-0.098	-0.089	-0.076	-0.050	-0.053	-0.044
8.76	.793							-0.094	-0.081	-0.073	-0.053	-0.057	-0.043
7.18	.822							-0.178	-0.176	-0.174	-0.131	-0.129	-0.129
5.36	.870							-0.233	-0.231	-0.227	-0.195	-0.195	-0.195
3.53	.908							-0.310	-0.308	-0.309	-0.294	-0.292	-0.292
2.33	.945							.004	.001	.000	.277	.270	.268
1.54	.984							.103	.101	.100	.103	.116	.114
.73	.985							.159	.154	.155	.047	.041	.036
.17	.996							.174	.173	.173	.076	.078	.076

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TABLE III.- AFTERBODY PRESSURE COEFFICIENTS - Continued

(1) Afterbody VIII - Concluded

 $t_j = 1,200^{\circ} F$ 

$\frac{x}{d}$	$\frac{x}{l_{max}}$	Pressure coefficients for -											
		$M_\infty = 0.80$			$M_\infty = 0.90$			$M_\infty = 1.00$			$M_\infty = 1.10$		
		$\theta = 0^{\circ}$	$\theta = 45^{\circ}$	$\theta = 72^{\circ}$	$\theta = 0^{\circ}$	$\theta = 45^{\circ}$	$\theta = 72^{\circ}$	$\theta = 0^{\circ}$	$\theta = 45^{\circ}$	$\theta = 72^{\circ}$	$\theta = 0^{\circ}$	$\theta = 45^{\circ}$	$\theta = 72^{\circ}$
$P_{t,j}/P_\infty = 2.05$				$P_{t,j}/P_\infty = 2.02$				$P_{t,j}/P_\infty = 2.05$				$P_{t,j}/P_\infty = 1.99$	
12.01	.719	-0.025	-0.026	-0.016	-0.019	-0.021	-0.007	-0.102	-0.105	-0.097	-0.047	-0.055	-0.045
10.39	.737	-0.039	-0.036	-0.029	-0.036	-0.031	-0.024	-0.086	-0.083	-0.075	-0.059	-0.052	-0.044
8.76	.755	-0.066	-0.059	-0.056	-0.068	-0.059	-0.057	-0.072	-0.072	-0.072	-0.063	-0.065	-0.053
7.18	.832	-0.142	-0.139	-0.138	-0.159	-0.162	-0.164	-0.175	-0.176	-0.174	-0.150	-0.146	-0.134
5.36	.870	-0.148	-0.144	-0.146	-0.161	-0.172	-0.176	-0.193	-0.194	-0.197	-0.159	-0.156	-0.140
3.99	.908	-0.117	-0.115	-0.121	-0.121	-0.121	-0.125	-0.130	-0.130	-0.137	-0.107	-0.109	-0.102
2.35	.943	-0.084	-0.084	-0.085	-0.085	-0.087	-0.084	-0.097	-0.097	-0.097	-0.061	-0.061	-0.057
1.38	.954	.015	.016	.016	.016	.016	.016	.123	.123	.120	.107	.104	.101
.73	.983	.070	.069	.069	.069	.069	.069	.161	.161	.162	.131	.131	.128
.36	.993	.099	.098	.098	.105	.115	.116	.128	.128	.128	.099	.099	.098
.17	.996	.107	.106	.107	.129	.131	.131	.187	.187	.189	.109	.109	.101
$P_{t,j}/P_\infty = 3.05$				$P_{t,j}/P_\infty = 3.01$				$P_{t,j}/P_\infty = 3.05$				$P_{t,j}/P_\infty = 2.99$	
18.01	.719	-0.026	-0.026	-0.016	-0.021	-0.021	-0.008	-0.108	-0.109	-0.109	-0.045	-0.056	-0.045
10.39	.737	-0.031	-0.031	-0.026	-0.031	-0.023	-0.023	-0.083	-0.083	-0.083	-0.058	-0.062	-0.042
8.76	.755	-0.069	-0.061	-0.058	-0.068	-0.059	-0.056	-0.082	-0.082	-0.082	-0.065	-0.065	-0.054
7.18	.832	-0.145	-0.139	-0.139	-0.172	-0.166	-0.165	-0.177	-0.177	-0.176	-0.130	-0.126	-0.124
5.36	.870	-0.148	-0.150	-0.146	-0.181	-0.180	-0.177	-0.202	-0.202	-0.202	-0.154	-0.154	-0.150
3.99	.908	-0.118	-0.118	-0.121	-0.133	-0.133	-0.136	-0.169	-0.169	-0.170	-0.134	-0.134	-0.130
2.35	.943	-0.088	-0.084	-0.084	-0.093	-0.093	-0.097	-0.119	-0.119	-0.120	-0.085	-0.085	-0.081
1.38	.954	.014	.012	.008	.008	.008	.008	.106	.106	.106	.063	.063	.058
.73	.983	.062	.061	.061	.063	.063	.063	.160	.160	.160	.086	.086	.085
.36	.993	.088	.089	.086	.109	.109	.107	.179	.179	.179	.079	.078	.076
.17	.996	.097	.099	.096	.128	.122	.122	.189	.189	.189	.091	.091	.091
$P_{t,j}/P_\infty = 5.01$				$P_{t,j}/P_\infty = 5.06$				$P_{t,j}/P_\infty = 5.02$				$P_{t,j}/P_\infty = 5.15$	
12.01	.719	-0.024	-0.026	-0.015	-0.020	-0.020	-0.009	-0.102	-0.110	-0.106	-0.044	-0.054	-0.043
10.39	.737	-0.039	-0.039	-0.029	-0.035	-0.030	-0.023	-0.083	-0.083	-0.077	-0.066	-0.061	-0.053
8.76	.755	-0.066	-0.058	-0.055	-0.067	-0.059	-0.055	-0.083	-0.083	-0.075	-0.063	-0.063	-0.053
7.18	.832	-0.140	-0.139	-0.136	-0.159	-0.166	-0.165	-0.175	-0.175	-0.174	-0.130	-0.126	-0.124
5.36	.870	-0.147	-0.145	-0.141	-0.179	-0.179	-0.176	-0.201	-0.201	-0.201	-0.155	-0.157	-0.150
3.99	.908	-0.117	-0.117	-0.118	-0.132	-0.132	-0.134	-0.169	-0.169	-0.170	-0.135	-0.135	-0.130
2.35	.943	-0.087	-0.084	-0.084	-0.094	-0.094	-0.096	-0.118	-0.118	-0.120	-0.083	-0.083	-0.079
1.38	.954	.014	.014	.008	.008	.008	.008	.106	.106	.106	.063	.063	.058
.73	.983	.062	.061	.061	.063	.063	.063	.160	.160	.160	.079	.078	.076
.36	.993	.088	.089	.086	.109	.109	.107	.179	.179	.179	.091	.091	.091
.17	.996	.097	.099	.096	.128	.122	.122	.189	.189	.189	.091	.091	.091
$P_{t,j}/P_\infty = 7.05$				$P_{t,j}/P_\infty = 7.00$				$P_{t,j}/P_\infty = 7.01$				$P_{t,j}/P_\infty = 7.05$	
18.01	.719	-0.026	-0.026	-0.014	-0.019	-0.019	-0.008	-0.104	-0.109	-0.106	-0.049	-0.058	-0.046
10.39	.737	-0.039	-0.039	-0.026	-0.033	-0.029	-0.023	-0.086	-0.086	-0.076	-0.061	-0.062	-0.056
8.76	.755	-0.066	-0.058	-0.055	-0.066	-0.057	-0.053	-0.088	-0.088	-0.072	-0.063	-0.063	-0.055
7.18	.832	-0.140	-0.137	-0.137	-0.167	-0.164	-0.163	-0.175	-0.175	-0.174	-0.130	-0.126	-0.124
5.36	.870	-0.145	-0.146	-0.141	-0.176	-0.177	-0.176	-0.202	-0.202	-0.201	-0.155	-0.156	-0.151
3.99	.908	-0.116	-0.116	-0.118	-0.132	-0.132	-0.132	-0.169	-0.169	-0.170	-0.135	-0.135	-0.130
2.35	.943	-0.083	-0.085	-0.085	-0.099	-0.099	-0.097	-0.118	-0.118	-0.120	-0.083	-0.083	-0.077
1.38	.954	.014	.019	.013	.021	.021	.020	.106	.106	.106	.063	.063	.058
.73	.983	.073	.076	.068	.101	.101	.102	.162	.162	.162	.091	.091	.087
.36	.993	.099	.100	.098	.128	.129	.129	.177	.177	.177	.109	.109	.108
.17	.996	.108	.107	.108	.131	.130	.130	.181	.181	.181	.109	.109	.108
$P_{t,j}/P_\infty = 9.04$				$P_{t,j}/P_\infty = 9.06$				$P_{t,j}/P_\infty = 9.05$				$P_{t,j}/P_\infty = 9.05$	
12.01	.719	-0.026	-0.026	-0.019	-0.020	-0.020	-0.007	-0.102	-0.111	-0.107	-0.049	-0.058	-0.046
10.39	.737	-0.039	-0.039	-0.029	-0.033	-0.029	-0.023	-0.086	-0.086	-0.076	-0.061	-0.062	-0.056
8.76	.755	-0.066	-0.058	-0.054	-0.066	-0.058	-0.053	-0.088	-0.088	-0.072	-0.063	-0.063	-0.055
7.18	.832	-0.141	-0.137	-0.136	-0.167	-0.164	-0.163	-0.177	-0.177	-0.176	-0.130	-0.127	-0.125
5.36	.870	-0.146	-0.147	-0.142	-0.176	-0.175	-0.176	-0.202	-0.202	-0.201	-0.155	-0.157	-0.155
3.99	.908	-0.115	-0.116	-0.116	-0.132	-0.132	-0.131	-0.169	-0.169	-0.170	-0.135	-0.135	-0.130
2.35	.943	-0.080	-0.084	-0.081	-0.096	-0.096	-0.095	-0.118	-0.118	-0.120	-0.083	-0.083	-0.077
1.38	.954	.013	.014	.011	.018	.018	.018	.106	.106	.106	.063	.063	.058
.73	.983	.083	.085	.080	.108	.108	.108	.162	.162	.162	.091	.091	.086
.36	.993	.093	.113	.113	.137	.137	.137	.181	.181	.181	.109	.109	.108
.17	.996	.108	.108	.108	.138	.138	.138	.181	.181	.181	.109	.109	.108
$P_{t,j}/P_\infty = 10.87$ (max.)				$P_{t,j}/P_\infty = 10.90$				$P_{t,j}/P_\infty = 10.90$				$P_{t,j}/P_\infty = 10.90$	
12.01	.719				-0.013	-0.016	-0.007	-0.102	-0.108	-0.102	-0.046	-0.056	-0.048
10.39	.737				-0.024	-0.026	-0.022	-0.086	-0.091	-0.086	-0.068	-0.075	-0.065
8.76	.755				-0.055	-0.057	-0.053	-0.083	-0.087	-0.083	-0.063	-0.071	-0.064
7.18	.832				-0.155	-0.153	-0.150	-0.176	-0.176	-0.176	-0.131	-0.127	-0.126
5.36	.870				-0.173	-0.172	-0.170	-0.202	-0.202	-0.202	-0.154	-0.157	-0.155
3.99	.908				-0.182	-0.182	-0.182	-0.202	-0.202	-0.202	-0.151	-0.157	-0.155
2.35	.943				-0.183	-0.183	-0.183	-0.202	-0.202	-0.202	-0.151	-0.157	-0.155
1.38	.954				-0.199	-0.199	-0.199	-0.202	-0.202	-0.202	-0.151	-0.157	-0.155
.73	.983				-0.193	-0.194	-0.194	-0.191	-0.191	-0.191	-0.149	-0.151	-0.150
.36	.993				-0.195	-0.194	-0.195	-0.197	-0.197	-0.197	-0.147	-0.147	-0.146
.17	.996				-0.198	-0.198	-0.198	-0.196	-0.196	-0.197	-0.146	-0.147	-0.146

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TABLE III.- AFTERBODY PRESSURE COEFFICIENTS - Continued

(j) Afterbody IX

 $t_j = \text{Cold}$ 

$\frac{x}{d_j}$	$\frac{k}{k_{\infty}}$	Pressure coefficients for -											
		$M_\infty = 0.80$			$M_\infty = 0.90$			$M_\infty = 1.00$			$M_\infty = 1.10$		
		$\theta = 0^\circ$	$\theta = 45^\circ$	$\theta = 72^\circ$	$\theta = 0^\circ$	$\theta = 45^\circ$	$\theta = 72^\circ$	$\theta = 0^\circ$	$\theta = 45^\circ$	$\theta = 72^\circ$	$\theta = 0^\circ$	$\theta = 45^\circ$	$\theta = 72^\circ$
		$P_{t,j}/P_\infty = 1.01$			$P_{t,j}/P_\infty = 1.02$			$P_{t,j}/P_\infty = 1.08$			$P_{t,j}/P_\infty = 1.09$		
16.95	0.604	-0.118	-0.140	-0.208	-0.167	---	-0.350	-0.059	---	-0.254	0.059	-0.125	-0.118
15.22	.644	-.120	-.142	-.209	-.157	-.213	-.259	-.051	-.261	-.256	-.076	-.125	-.130
15.31	.654	-.076	-.099	-.081	-.055	-.054	-.019	-.261	-.247	-.156	-.159	-.149	-.097
11.60	.724	-.042	-.045	-.035	-.030	-.034	-.029	-.170	-.153	-.156	-.156	-.099	-.076
10.09	.764	-.052	-.043	-.035	-.034	-.042	-.039	-.170	-.153	-.156	-.163	-.128	-.098
8.38	.804	-.052	-.043	-.042	-.056	-.047	-.045	-.164	-.153	-.156	-.159	-.129	-.126
6.67	.844	---	---	---	---	---	---	---	---	---	---	---	---
4.96	.884	---	---	---	---	---	---	---	---	---	---	---	---
3.29	.924	-.016	-.013	-.015	-.015	-.013	-.017	-.068	-.079	-.082	-.180	-.137	-.130
2.31	.946	.004	.005	.006	.007	.006	.007	.059	.058	.056	.125	.124	.120
1.54	.964	.023	.021	.023	.026	.026	.027	.087	.089	.089	.089	.089	.089
.17	.995	.026	.026	.026	.026	.026	.026	.111	.111	.111	.026	.026	.026
		$P_{t,j}/P_\infty = 2.00$			$P_{t,j}/P_\infty = 2.07$			$P_{t,j}/P_\infty = 1.99$			$P_{t,j}/P_\infty = 2.01$		
16.95	.604	-.120	-.141	-.223	-.168	---	-.389	-.090	---	-.254	.041	-.113	-.113
15.22	.644	-.121	-.142	-.209	-.159	-.235	-.255	-.053	-.248	-.258	-.074	-.113	-.120
15.31	.654	-.077	-.099	-.047	-.059	-.058	-.018	-.260	-.248	-.158	-.156	-.144	-.096
11.60	.724	-.051	-.043	-.035	-.033	-.041	-.032	-.209	-.182	-.158	-.159	-.099	-.070
10.09	.764	-.051	-.041	-.033	-.033	-.041	-.032	-.209	-.182	-.158	-.163	-.111	-.099
8.38	.804	-.044	-.044	-.046	-.053	-.045	-.045	-.164	-.153	-.151	-.151	-.109	-.103
6.67	.844	---	---	---	---	---	---	---	---	---	---	---	---
4.96	.884	---	---	---	---	---	---	---	---	---	---	---	---
3.29	.924	-.012	-.008	-.012	-.010	-.007	-.011	-.042	-.039	-.039	-.161	-.157	-.153
2.31	.946	.008	.008	.009	.013	.012	.014	.052	.059	.060	.124	.125	.122
1.54	.964	.026	.026	.026	.026	.026	.026	.100	.098	.099	.087	.087	.087
.17	.995	.007	.009	.010	.019	.021	.021	.113	.113	.113	.026	.026	.026
		$P_{t,j}/P_\infty = 2.90$			$P_{t,j}/P_\infty = 5.00$			$P_{t,j}/P_\infty = 2.98$			$P_{t,j}/P_\infty = 2.97$		
16.95	.604	-.121	---	-.228	-.168	---	-.386	-.091	---	-.253	.039	----	-.120
15.22	.644	-.122	-.140	-.209	-.159	-.235	-.254	-.054	-.248	-.258	-.073	----	-.121
15.31	.654	-.079	-.061	-.039	-.059	-.054	-.018	-.261	-.248	-.158	-.149	-.097	----
11.60	.724	-.052	-.044	-.026	-.060	-.041	-.022	-.209	-.186	-.158	-.136	-.099	-.070
10.09	.764	-.053	-.042	-.035	-.051	-.041	-.033	-.171	-.164	-.156	-.108	-.101	-.096
8.38	.804	-.043	-.043	-.042	-.055	-.049	-.044	-.164	-.155	-.151	-.120	-.109	-.106
6.67	.844	---	---	---	---	---	---	---	---	---	---	---	---
4.96	.884	---	---	---	---	---	---	---	---	---	---	---	---
3.29	.924	-.013	-.009	-.013	-.011	-.007	-.018	-.046	-.037	-.038	-.161	-.157	-.152
2.31	.946	.006	.006	.009	.013	.012	.013	.060	.057	.058	.125	.125	.123
1.54	.964	.028	.028	.028	.028	.028	.028	.097	.095	.096	.089	.089	.088
.17	.995	-.005	-.001	.001	.014	.015	.017	.104	.104	.104	.001	.007	.006

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TABLE III.— AFTERBODY PRESSURE COEFFICIENTS - Continued

(j) Afterbody IX - Continued

 $T_j = 800^{\circ} F$ 

$\frac{K}{C_d}$	$\frac{K}{r_{max}}$	Pressure coefficients for -												
		M <sub>∞</sub> = 0.80			M <sub>∞</sub> = 0.90			M <sub>∞</sub> = 1.00			M <sub>∞</sub> = 1.10			
		$\theta = 0^{\circ}$	$\theta = 45^{\circ}$	$\theta = 72^{\circ}$	$\theta = 0^{\circ}$	$\theta = 45^{\circ}$	$\theta = 72^{\circ}$	$\theta = 0^{\circ}$	$\theta = 45^{\circ}$	$\theta = 72^{\circ}$	$\theta = 0^{\circ}$	$\theta = 45^{\circ}$	$\theta = 72^{\circ}$	
		$P_{t,j}/P_{\infty} = 1.98$			$P_{t,j}/P_{\infty} = 2.07$			$P_{t,j}/P_{\infty} = 1.99$			$P_{t,j}/P_{\infty} = 1.99$			
16.93	.60	-0.119	-0.121	-0.226	-0.169	-0.229	-0.326	-0.092	-0.250	-0.256	0.081	-0.111	-0.120	
15.22	.64	-0.121	-0.139	-0.157	-0.204	-0.204	-0.269	-0.205	-0.250	-0.260	-0.073	-0.112	-0.116	
15.31	.69	-0.076	-0.060	-0.036	-0.058	-0.053	-0.077	-0.265	-0.250	-0.250	-0.139	-0.139	-0.094	
11.80	.74	-0.060	-0.043	-0.034	-0.059	-0.040	-0.080	-0.211	-0.187	-0.187	-0.134	-0.099	-0.070	
10.09	.79	-0.050	-0.041	-0.033	-0.049	-0.039	-0.082	-0.173	-0.165	-0.165	-0.108	-0.099	-0.068	
8.38	.84	-0.050	-0.042	-0.040	-0.053	-0.044	-0.081	-0.166	-0.157	-0.157	-0.120	-0.108	-0.084	
6.67	.89	-0.050	-0.046	—	-0.049	-0.049	—	-0.170	-0.168	-0.168	—	-0.126	—	
4.96	.94	-0.050	-0.050	—	-0.052	-0.051	—	-0.168	-0.166	-0.166	-0.142	-0.141	—	
3.10	.98	-0.044	-0.005	-0.009	-0.007	-0.004	-0.008	-0.041	-0.034	-0.034	-0.142	-0.142	—	
2.11	.99	-0.012	.011	.013	.017	.016	.016	.066	.050	.050	.100	.104	.104	
1.34	.99	.021	.021	.021	.026	.026	.028	.104	.100	.100	.092	.085	.085	
.17	.99	.024	.024	.025	.027	.027	.027	.124	.123	.123	.108	.103	.101	
		$P_{t,j}/P_{\infty} = 2.98$			$P_{t,j}/P_{\infty} = 2.98$			$P_{t,j}/P_{\infty} = 2.97$			$P_{t,j}/P_{\infty} = 2.99$			
16.93	.60	-0.120	-0.121	-0.227	-0.167	-0.229	-0.329	-0.091	-0.250	-0.256	0.081	-0.111	-0.120	
15.22	.64	-0.121	-0.139	-0.158	-0.204	-0.204	-0.269	-0.207	-0.250	-0.256	-0.073	-0.112	-0.116	
15.31	.69	-0.077	-0.060	-0.038	-0.058	-0.054	-0.078	-0.265	-0.250	-0.250	-0.139	-0.139	-0.094	
11.80	.74	-0.062	-0.043	-0.026	-0.059	-0.041	-0.082	-0.211	-0.187	-0.187	-0.139	-0.100	-0.070	
10.09	.79	-0.051	-0.042	-0.033	-0.050	-0.041	-0.083	-0.173	-0.165	-0.165	-0.108	-0.099	-0.068	
8.38	.84	-0.051	-0.043	-0.041	-0.051	-0.043	-0.083	-0.166	-0.157	-0.157	-0.120	-0.108	-0.084	
6.67	.89	-0.051	-0.047	—	-0.050	-0.050	—	-0.170	-0.168	-0.168	—	-0.137	—	
4.96	.94	-0.051	-0.033	-0.031	-0.047	-0.041	-0.083	-0.166	-0.157	-0.157	-0.142	-0.141	—	
3.10	.98	-0.011	.008	.012	.009	.006	.006	.049	.041	.041	.103	.104	.104	
2.11	.99	.009	.009	.011	.013	.013	.013	.099	.097	.097	.126	.126	.126	
1.34	.99	.012	.012	.013	.013	.027	.028	.111	.112	.112	.087	.088	.088	
.17	.99	.012	.013	.013	.027	.027	.028	.111	.112	.112	.094	.095	.094	
		$P_{t,j}/P_{\infty} = 5.05$			$P_{t,j}/P_{\infty} = 5.01$			$P_{t,j}/P_{\infty} = 5.05$			$P_{t,j}/P_{\infty} = 5.01$			
16.93	.60							-0.092	-0.257	-0.267	0.082	-0.112	-0.121	
15.22	.64							-0.083	-0.266	-0.266	-0.075	-0.113	-0.116	
15.31	.69							-0.263	-0.250	-0.250	-0.138	-0.138	-0.096	
11.80	.74							-0.211	-0.187	-0.187	-0.139	-0.139	-0.094	
10.09	.79							-0.173	-0.165	-0.165	-0.107	-0.107	-0.093	
8.38	.84							-0.166	-0.155	-0.155	-0.119	-0.119	-0.103	
6.67	.89							—	-0.167	-0.167	—	-0.137	-0.137	—
4.96	.94							-0.083	-0.089	-0.089	—	-0.131	-0.132	—
3.10	.98							.078	.087	.087	-0.121	-0.121	-0.122	—
2.11	.99							.108	.107	.107	-0.083	-0.083	-0.083	—
1.34	.99							.133	.133	.133	.059	.059	.059	.059
.17	.99													

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TABLE III.- AFTERBODY PRESSURE COEFFICIENTS - Continued

(i) Afterbody IX - Concluded

$$t_3 = 1,200^{\circ} F$$

$\frac{x}{d_3}$	$\frac{x}{r_{max}}$	Pressure coefficients for -											
		K <sub>m</sub> = 0.60			K <sub>m</sub> = 0.90			K <sub>m</sub> = 1.00			K <sub>m</sub> = 1.10		
		$\theta = 0^{\circ}$	$\theta = 45^{\circ}$	$\theta = 72^{\circ}$	$\theta = 0^{\circ}$	$\theta = 45^{\circ}$	$\theta = 72^{\circ}$	$\theta = 0^{\circ}$	$\theta = 45^{\circ}$	$\theta = 72^{\circ}$	$\theta = 0^{\circ}$	$\theta = 45^{\circ}$	$\theta = 72^{\circ}$
		$P_{t,J}/P_m = 1.99$			$P_{t,J}/P_m = 2.07$			$P_{t,J}/P_m = 1.99$			$P_{t,J}/P_m = 2.01$		
16.95	.604	-0.139	-----	-0.226	-0.157	-----	-0.320	-0.091	-----	-0.295	0.059	-----	-0.127
15.22	.594	-.121	-1.240	-.158	-.213	-.242	-.262	-.126	-.120	-.159	-.071	-.117	-.142
15.51	.584	-.077	-.099	-.017	-.098	-.064	-.018	-.265	-.250	-.159	-.155	-.136	-.021
15.80	.574	-.061	-.041	-.026	-.060	-.061	-.020	-.211	-.187	-.159	-.151	-.097	-.070
10.09	.564	-.051	-.042	-.034	-.051	-.051	-.018	-.172	-.156	-.157	-.106	-.097	-.088
8.36	.564	-.052	-.044	-.041	-.054	-.043	-.042	-.165	-.156	-.158	-.118	-.106	-.105
6.67	.564	----	-.046	----	----	-.051	----	-.170	----	----	-.136	----	----
4.96	.564	----	-.032	-.030	----	-.033	-.032	----	-.168	----	-.142	----	-.141
3.29	.564	-.010	-.007	-.010	-.008	-.005	-.005	-.066	-.050	-.059	-.142	-.137	-.142
2.51	.564	.011	.010	.012	.017	.016	.018	.084	.062	.062	.129	.124	.128
1.54	.564	.021	.020	.020	.029	.029	.028	.059	.039	.039	.101	.091	.084
.17	.564	.026	.025	.027	.027	.025	.025	.127	.127	.125	.053	.053	.053
		$P_{t,J}/P_m = 2.97$			$P_{t,J}/P_m = 3.05$			$P_{t,J}/P_m = 2.98$			$P_{t,J}/P_m = 2.99$		
16.95	.504	-.120	-----	-.226	-.166	-----	-.350	-.090	-----	-.295	-.095	-----	-.126
15.22	.504	-.121	-.139	-.159	-.214	-.238	-.238	-.091	-.094	-.159	-.072	-.107	-.142
15.51	.504	-.077	-.060	-.047	-.063	-.063	-.016	-.265	-.269	-.159	-.155	-.137	-.041
11.80	.504	-.053	-.044	-.026	-.058	-.040	-.020	-.213	-.187	-.159	-.132	-.098	-.068
10.09	.504	-.051	-.042	-.035	-.048	-.039	-.031	-.172	-.156	-.157	-.106	-.097	-.088
8.36	.504	-.052	-.044	-.041	-.053	-.045	-.042	-.165	-.156	-.153	-.115	-.105	-.102
6.67	.504	----	-.046	----	----	-.050	----	-.170	----	----	-.136	----	----
4.96	.504	----	-.031	-.031	----	-.033	-.031	----	-.168	-.166	----	-.142	-.140
3.29	.504	-.010	-.007	-.010	-.007	-.006	-.007	-.053	-.044	-.044	-.142	-.139	-.138
2.51	.504	.011	.010	.013	.018	.016	.018	.059	.057	.057	.124	.124	.128
1.54	.504	.020	.029	.031	.039	.038	.039	.059	.057	.058	.057	.057	.067
.17	.504	.016	.017	.020	.020	.020	----	.119	.117	.119	.053	.053	----
		$P_{t,J}/P_m = 4.96$			$P_{t,J}/P_m = 4.98$			$P_{t,J}/P_m = 4.96$			$P_{t,J}/P_m = 4.98$		
16.95	.404							-.090	-.049	-.256	.041	-----	-.186
15.22	.404							-.206	-.049	-.254	-.075	-.111	-.147
15.51	.404							-.261	-.050	-.259	-.127	-.142	-.145
11.80	.404							-.212	-.050	-.259	-.134	-.100	-.092
10.09	.404							-.172	-.165	-.259	-.105	-.100	-.098
8.36	.404							-.166	-.156	-.252	-.120	-.109	-.106
6.67	.404							----	-.171	----	----	-.237	----
4.96	.404							----	-.169	-.256	----	-.143	-.141
3.29	.404							-.036	-.036	-.058	-.135	-.140	-.142
2.51	.404							-.069	-.067	-.066	-.125	-.125	-.125
1.54	.404							.110	.105	.109	-.089	-.084	-.088
.17	.404							.140	.140	.141	.061	.059	.059













TABLE III.- AFTERBODY PRESSURE COEFFICIENTS - Continued

(a) Afterbody XII

 $t_j = \text{Cold}$ 

$\frac{x}{d_3}$	$\frac{x}{L_{\infty}}$	Pressure coefficients for -											
		M <sub>a</sub> = 0.80			M <sub>a</sub> = 0.90			M <sub>a</sub> = 1.00			M <sub>a</sub> = 1.10		
		$\theta = 0^\circ$	$\theta = 45^\circ$	$\theta = 72^\circ$	$\theta = 0^\circ$	$\theta = 45^\circ$	$\theta = 72^\circ$	$\theta = 0^\circ$	$\theta = 45^\circ$	$\theta = 72^\circ$	$\theta = 0^\circ$	$\theta = 45^\circ$	$\theta = 72^\circ$
		$P_{t,j}/P_a = 1.04$			$P_{t,j}/P_a = 1.06$			$P_{t,j}/P_a = 1.10$			$P_{t,j}/P_a = 0.99$		
12.01	.719	-.016	-.010	.006	-.009	-.005	.012	-.097	-.091	-.073	-.059	-.056	-.054
10.39	.757	-.027	-.019	-.016	-.023	-.014	-.011	-.085	-.077	-.076	-.064	-.058	-.052
8.76	.795	-.027	-.031	-.027	-.028	-.027	-.025	-.065	-.070	-.067	-.059	-.053	-.051
7.18	.832	-.038	-.066	-.050	-.058	-.055	-.044	-.075	-.072	-.063	-.057	-.053	-.052
5.36	.870	-.115	-.110	-.109	-.125	-.120	-.125	-.103	-.103	-.103	-.095	-.094	-.093
3.93	.908	-.178	-.214	-.207	-.177	-.171	-.175	-.175	-.177	-.163	-.161	-.160	-.155
2.50	.945	-.267	-.245	-.249	-.263	-.261	-.266	-.263	-.265	-.261	-.265	-.265	-.259
1.73	.983	-.002	-.004	-.007	.011	.008	.005	-.082	.079	.079	-.205	-.196	-.186
.36	.993	.091	.085	.083	.065	.060	.060	.120	.118	.118	-.099	-.102	-.095
.17	.996	.058	.059	.059	.063	.060	.060	.132	.131	.131	-.051	-.056	-.053
		$P_{t,j}/P_a = 2.00$			$P_{t,j}/P_a = 2.00$			$P_{t,j}/P_a = 2.00$			$P_{t,j}/P_a = 2.00$		
12.01	.719	-.016	-.007	.009	-.010	-.001	.012	-.100	-.090	-.076	-.057	-.052	-.052
10.39	.757	-.026	-.019	-.016	-.022	-.014	-.011	-.086	-.078	-.077	-.059	-.048	-.048
8.76	.795	-.027	-.030	-.028	-.023	-.027	-.023	-.066	-.070	-.067	-.054	-.059	-.057
7.18	.832	-.097	-.066	-.051	-.057	-.055	-.049	-.071	-.067	-.061	-.056	-.054	-.049
5.36	.870	-.134	-.109	-.111	-.126	-.122	-.123	-.103	-.103	-.103	-.080	-.074	-.072
3.93	.908	-.179	-.180	-.182	-.177	-.172	-.170	-.174	-.163	-.163	-.205	-.207	-.205
2.50	.945	-.255	-.219	-.212	-.227	-.230	-.230	-.248	-.251	-.253	-.205	-.203	-.203
1.73	.983	-.095	-.091	-.097	-.096	-.094	-.096	-.076	-.075	-.076	-.120	-.119	-.119
.36	.993	.034	.025	.026	.003	.019	.011	.129	.129	.129	-.082	-.083	-.079
.17	.996	.048	.044	.045	.071	.068	.068	.135	.135	.135	-.093	-.093	-.093
		$P_{t,j}/P_a = 5.00$			$P_{t,j}/P_a = 2.98$			$P_{t,j}/P_a = 2.98$			$P_{t,j}/P_a = 2.98$		
12.01	.719	-.015	-.005	.009	-.011	-.001	.011	-.101	-.090	-.076	-.058	-.051	-.051
10.39	.757	-.024	-.018	-.015	-.023	-.015	-.012	-.086	-.078	-.077	-.061	-.047	-.048
8.76	.795	-.026	-.020	-.022	-.020	-.028	-.025	-.067	-.059	-.057	-.056	-.050	-.048
7.18	.832	-.096	-.069	-.063	-.079	-.071	-.075	-.071	-.067	-.061	-.058	-.056	-.049
5.36	.870	-.124	-.108	-.110	-.130	-.126	-.125	-.108	-.108	-.108	-.082	-.073	-.072
3.93	.908	-.179	-.180	-.181	-.189	-.181	-.181	-.179	-.179	-.179	-.205	-.207	-.205
2.50	.945	-.257	-.217	-.215	-.229	-.231	-.231	-.249	-.252	-.252	-.205	-.203	-.203
1.73	.983	-.095	-.091	-.096	-.099	-.098	-.098	-.076	-.075	-.076	-.121	-.120	-.119
.36	.993	.023	.020	.023	-.005	-.006	-.005	.076	.078	.078	-.126	-.126	-.125
.17	.996	.039	.034	.034	.065	.057	.057	.136	.136	.136	-.093	-.093	-.093
		$P_{t,j}/P_a = 4.99$			$P_{t,j}/P_a = 4.96$			$P_{t,j}/P_a = 4.98$			$P_{t,j}/P_a = 4.99$		
12.01	.719	-.015	-.006	.004	-.009	-.000	.012	-.102	-.092	-.076	-.060	-.056	-.051
10.39	.757	-.024	-.018	-.015	-.021	-.014	-.011	-.086	-.078	-.077	-.062	-.048	-.048
8.76	.795	-.026	-.020	-.017	-.023	-.017	-.023	-.066	-.071	-.068	-.057	-.059	-.056
7.18	.832	-.096	-.069	-.063	-.079	-.071	-.075	-.071	-.068	-.061	-.058	-.053	-.048
5.36	.870	-.124	-.108	-.110	-.130	-.126	-.125	-.108	-.108	-.108	-.080	-.072	-.070
3.93	.908	-.179	-.180	-.181	-.189	-.181	-.181	-.179	-.179	-.179	-.205	-.207	-.205
2.50	.945	-.257	-.217	-.215	-.229	-.231	-.231	-.249	-.252	-.252	-.205	-.203	-.203
1.73	.983	-.095	-.091	-.096	-.099	-.098	-.098	-.076	-.075	-.076	-.121	-.120	-.119
.36	.993	.023	.020	.023	-.005	-.006	-.005	.076	.078	.078	-.126	-.126	-.125
.17	.996	.039	.034	.034	.065	.057	.057	.136	.136	.136	-.093	-.093	-.093
		$P_{t,j}/P_a = 5.82$ (max.)			$P_{t,j}/P_a = 6.91$ (max.)			$P_{t,j}/P_a = 6.94$			$P_{t,j}/P_a = 6.96$		
12.01	.719	-.016	-.006	.004	-.012	-.002	.010	-.102	-.098	-.077	-.057	-.052	-.052
10.39	.757	-.023	-.019	-.017	-.028	-.015	-.014	-.067	-.079	-.071	-.048	-.048	-.048
8.76	.795	-.026	-.030	-.028	-.025	-.029	-.027	-.067	-.067	-.067	-.039	-.039	-.036
7.18	.832	-.097	-.098	-.090	-.060	-.058	-.052	-.071	-.067	-.061	-.053	-.053	-.048
5.36	.870	-.124	-.110	-.110	-.125	-.122	-.122	-.108	-.108	-.108	-.080	-.071	-.070
3.93	.908	-.179	-.180	-.181	-.189	-.181	-.181	-.179	-.179	-.179	-.205	-.207	-.205
2.50	.945	-.257	-.217	-.215	-.229	-.231	-.231	-.249	-.252	-.252	-.205	-.203	-.203
1.73	.983	-.095	-.091	-.096	-.099	-.098	-.098	-.076	-.075	-.076	-.121	-.120	-.119
.36	.993	.023	.020	.023	-.005	-.006	-.005	.076	.078	.078	-.126	-.126	-.125
.17	.996	.039	.034	.034	.065	.057	.057	.136	.136	.136	-.093	-.093	-.093
		$P_{t,j}/P_a = 6.96$			CONFIDENTIAL			CONFIDENTIAL			CONFIDENTIAL		







TABLE III.- AFTERSPOUT PRESSURE COEFFICIENTS - Continued

(a) Afterbody XIII - Continued

 $t_3 = 800^{\circ} \text{ F}$ 

$\frac{x}{d_1}$	$\frac{x}{t_{max}}$	Pressure coefficients for -											
		$M_\infty = 0.80$			$M_\infty = 0.90$			$M_\infty = 1.00$			$M_\infty = 1.10$		
		$\theta = 0^\circ$			$\theta = 45^\circ$			$\theta = 72^\circ$			$\theta = 0^\circ$		
		$P_{t,J}/P_m = 1.99$			$P_{t,J}/P_m = 1.99$			$P_{t,J}/P_m = 2.01$			$P_{t,J}/P_m = 1.96$		
10.01	.719	-0.011	-0.009	0.000	-0.009	-0.004	0.005	-0.099	-0.067	-0.095	-0.090	-0.049	-0.039
10.59	.757	-.019	-.016	-.013	-.019	-.013	-.018	-.072	-.071	-.066	-.062	-.025	-.022
7.18	.832	-.071	-.076	-.073	-.059	-.073	-.053	-.065	-.060	-.066	-.065	-.061	-.055
5.56	.870	-.061	-.068	-.063	-.070	-.072	-.069	-.059	-.057	-.057	-.053	-.053	-.049
3.93	.908	-.158	-.154	-.158	-.190	-.185	-.189	-.161	-.156	-.154	-.152	-.156	-.140
2.55	.935	-.258	-.259	-.256	-.316	-.322	-.317	-.271	-.269	-.262	-.266	-.259	-.190
1.54	.964	-.191	-.191	-.201	-.226	-.230	-.234	-.263	-.257	-.258	-.271	-.265	-.263
.73	.983	-.079	-.077	-.085	-.088	-.089	-.070	-.088	-.076	-.078	-.071	-.077	-.072
.50	.993	.008	-.001	-.001	.015	.013	.012	.034	.047	.033	-.159	-.147	-.157
.17	.996	.023	.024	.026	.026	.026	.035	.026	.049	.030	-.156	-.152	-.152
		$P_{t,J}/P_m = 3.99$			$P_{t,J}/P_m = 3.00$			$P_{t,J}/P_m = 3.01$			$P_{t,J}/P_m = 3.00$		
12.01	.719	-.015	-.011	-.001	-.010	-.004	.009	-.006	-.009	-.004	-.000	-.049	-.035
10.59	.757	-.021	-.021	-.018	-.019	-.016	-.011	-.008	-.011	-.013	-.010	-.054	-.052
7.18	.832	-.056	-.056	-.053	-.023	-.021	-.018	-.058	-.059	-.065	-.061	-.060	-.055
5.56	.870	-.082	-.080	-.082	-.080	-.075	-.075	-.063	-.063	-.059	-.054	-.054	-.054
3.93	.908	-.161	-.158	-.163	-.192	-.186	-.190	-.159	-.155	-.156	-.144	-.154	-.142
2.55	.935	-.239	-.244	-.246	-.320	-.325	-.321	-.287	-.289	-.288	-.293	-.288	-.188
1.54	.964	-.197	-.199	-.209	-.232	-.236	-.240	-.282	-.285	-.287	-.271	-.281	-.261
.73	.983	-.087	-.086	-.091	-.073	-.077	-.082	-.065	-.060	-.069	-.111	-.109	-.101
.50	.993	-.007	-.012	-.012	.008	.005	.005	.026	.019	.019	-.212	-.210	-.196
.17	.996	.014	-.012	.009	.030	.029	.029	.045	.045	.042	-.192	-.191	-.186
		$P_{t,J}/P_m = 5.00$			$P_{t,J}/P_m = 5.03$			$P_{t,J}/P_m = 5.02$			$P_{t,J}/P_m = 5.00$		
12.01	.719	-.014	-.010	-.000	-.010	-.009	.006	-.008	-.009	-.008	-.001	-.050	-.041
10.59	.757	-.021	-.021	-.016	-.018	-.016	-.015	-.016	-.016	-.017	-.013	-.065	-.052
8.76	.828	-.051	-.051	-.051	-.021	-.020	-.019	-.053	-.054	-.061	-.054	-.054	-.051
7.18	.852	-.094	-.096	-.095	-.060	-.060	-.056	-.063	-.063	-.066	-.059	-.058	-.057
5.56	.880	-.163	-.170	-.168	-.172	-.174	-.172	-.157	-.157	-.157	-.157	-.156	-.156
3.93	.908	-.247	-.254	-.256	-.322	-.321	-.311	-.286	-.286	-.286	-.290	-.288	-.197
2.55	.935	-.297	-.304	-.304	-.340	-.340	-.340	-.304	-.304	-.304	-.307	-.307	-.268
1.54	.964	-.205	-.204	-.205	-.240	-.240	-.246	-.204	-.204	-.204	-.205	-.205	-.166
.73	.983	-.097	-.097	-.100	-.087	-.088	-.098	-.100	-.114	-.112	-.105	-.203	-.199
.50	.993	-.022	-.022	-.028	-.003	-.003	-.007	.014	.015	.006	-.227	-.220	-.209
.17	.996	-.004	-.005	-.005	.015	.014	.012	.034	.051	.032	-.170	-.170	-.168
		$P_{t,J}/P_m = 6.99$			$P_{t,J}/P_m = 7.00$			$P_{t,J}/P_m = 7.00$			$P_{t,J}/P_m = 6.91$		
12.01	.719	-.012	-.008	.001	-.010	-.004	.006	-.006	-.006	-.003	-.003	-.051	-.042
10.59	.757	-.021	-.019	-.015	-.015	-.010	-.009	-.007	-.007	-.005	-.005	-.053	-.053
8.76	.828	-.050	-.049	-.048	-.038	-.031	-.031	-.054	-.053	-.063	-.063	-.061	-.057
7.18	.852	-.107	-.107	-.106	-.095	-.095	-.094	-.084	-.083	-.086	-.086	-.085	-.084
5.56	.880	-.168	-.173	-.173	-.168	-.171	-.172	-.157	-.157	-.157	-.157	-.156	-.156
3.93	.908	-.241	-.249	-.247	-.311	-.311	-.316	-.284	-.284	-.284	-.286	-.286	-.186
2.55	.935	-.298	-.305	-.304	-.341	-.341	-.346	-.308	-.308	-.308	-.310	-.309	-.259
1.54	.964	-.203	-.209	-.211	-.221	-.221	-.226	-.192	-.192	-.192	-.194	-.193	-.154
.73	.983	-.091	-.091	-.112	-.112	-.111	-.109	-.113	-.108	-.108	-.108	-.107	-.107
.50	.993	-.052	-.056	-.051	-.040	-.039	-.019	-.017	-.004	-.004	-.003	-.223	-.221
.17	.996	-.039	-.041										
		$P_{t,J}/P_m = 9.00$			$P_{t,J}/P_m = 9.02$			$P_{t,J}/P_m = 9.03$			$P_{t,J}/P_m = 9.02$		
12.01	.719	-.013	-.009	.000	-.011	-.006	.004	-.007	-.008	-.003	-.003	-.047	-.037
10.59	.757	-.021	-.021	-.015	-.022	-.017	-.011	-.009	-.009	-.005	-.005	-.056	-.048
8.76	.828	-.051	-.051	-.051	-.048	-.048	-.046	-.059	-.058	-.063	-.063	-.061	-.053
7.18	.852	-.107	-.107	-.106	-.094	-.094	-.093	-.087	-.086	-.093	-.093	-.093	-.092
5.56	.880	-.169	-.172	-.171	-.162	-.162	-.167	-.141	-.141	-.143	-.143	-.143	-.140
3.93	.908	-.244	-.249	-.247	-.313	-.313	-.316	-.287	-.287	-.289	-.289	-.286	-.286
2.55	.935	-.298	-.304	-.303	-.341	-.341	-.346	-.308	-.308	-.310	-.310	-.309	-.259
1.54	.964	-.204	-.212	-.221	-.221	-.226	-.226	-.195	-.195	-.196	-.196	-.195	-.168
.73	.983	-.092	-.115	-.117	-.122	-.111	-.109	-.113	-.108	-.108	-.108	-.107	-.107
.50	.993	-.052	-.056	-.051	-.040	-.039	-.019	-.017	-.004	-.004	-.003	-.223	-.221
.17	.996	-.039	-.041										
		$P_{t,J}/P_m = 11.05$			$P_{t,J}/P_m = 11.01$								
12.01	.719												
10.59	.757												
8.76	.828												
7.18	.852												
5.56	.880												
3.93	.908												
2.55	.935												
1.54	.964												
.73	.983												
.50	.993												
.17	.996												

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TABLE III.- AFTERBODY PRESSURE COEFFICIENTS - Continued

(c) Afterbody XIV

 $t_d = \text{Cold}$ 

$\frac{x}{d}$	$\frac{x}{L_{\infty}}$	Pressure coefficients for -											
		M <sub>∞</sub> = 0.80			M <sub>∞</sub> = 0.90			M <sub>∞</sub> = 1.00			M <sub>∞</sub> = 1.10		
		$\theta = 0^\circ$	$\theta = 45^\circ$	$\theta = 72^\circ$	$\theta = 0^\circ$	$\theta = 45^\circ$	$\theta = 72^\circ$	$\theta = 0^\circ$	$\theta = 45^\circ$	$\theta = 72^\circ$	$\theta = 0^\circ$	$\theta = 45^\circ$	$\theta = 72^\circ$
		$P_{t,J}/P_{\infty} = 0.94$			$P_{t,J}/P_{\infty} = 0.92$			$P_{t,J}/P_{\infty} = 0.90$			$P_{t,J}/P_{\infty} = 0.84$		
7.93	.722	-0.015	-0.003	0.027	-0.012	0.005	0.025	-0.153	-0.127	-0.098	-0.055	-0.058	-0.027
7.56	.742	-0.005	.000	—	—	—	—	-0.104	-0.096	—	-0.092	-0.042	—
6.79	.762	-0.014	-0.006	0.000	-0.008	-0.001	0.005	-0.102	-0.099	-0.069	-0.077	-0.032	-0.044
5.65	.802	-0.014	-0.011	-0.005	-0.008	-0.005	-0.001	-0.051	-0.061	-0.077	-0.061	-0.055	-0.053
4.31	.842	-0.016	-0.012	-0.014	-0.017	-0.017	-0.009	-0.078	-0.085	-0.099	-0.064	-0.059	-0.055
3.22	.882	-0.016	-0.012	-0.014	-0.017	-0.017	-0.009	-0.066	-0.076	-0.091	-0.064	-0.067	-0.064
2.22	.922	-0.016	-0.012	-0.014	-0.017	-0.017	-0.009	-0.066	-0.076	-0.091	-0.064	-0.067	-0.064
1.65	.962	-0.016	-0.012	-0.014	-0.017	-0.017	-0.009	-0.066	-0.076	-0.091	-0.064	-0.067	-0.064
1.08	.982	-0.013	-0.009	-0.016	-0.017	-0.017	-0.009	-0.066	-0.076	-0.091	-0.064	-0.067	-0.064
.51	.982	-0.018	-0.009	-0.016	-0.017	-0.017	-0.009	-0.066	-0.076	-0.091	-0.064	-0.067	-0.064
.23	.992	-0.018	-0.009	-0.016	-0.017	-0.017	-0.009	-0.066	-0.076	-0.091	-0.064	-0.067	-0.064
.11	.992	-0.109	-0.112	-0.109	-0.117	-0.118	-0.115	-0.061	-0.062	-0.076	-0.074	-0.065	-0.068
		$P_{t,J}/P_{\infty} = 1.96$			$P_{t,J}/P_{\infty} = 1.97$			$P_{t,J}/P_{\infty} = 1.96$			$P_{t,J}/P_{\infty} = 1.96$		
7.93	.722	-0.019	-0.009	0.013	-0.014	0.002	0.025	-0.152	-0.129	-0.099	-0.053	-0.055	-0.025
7.56	.742	-0.007	.000	—	—	—	—	-0.106	-0.096	—	-0.051	-0.041	—
6.79	.762	-0.013	-0.008	0.000	-0.009	-0.001	0.007	-0.101	-0.099	-0.068	-0.055	-0.051	-0.043
5.65	.802	-0.013	-0.011	-0.008	-0.009	-0.008	0.003	-0.082	-0.079	-0.077	-0.053	-0.051	-0.051
4.31	.842	-0.017	-0.015	-0.016	-0.012	-0.008	-0.011	-0.070	-0.084	-0.069	-0.052	-0.056	-0.051
3.22	.882	-0.022	-0.023	-0.022	-0.018	-0.019	-0.019	-0.044	-0.045	-0.042	-0.050	-0.051	-0.052
2.22	.922	-0.022	-0.023	-0.022	-0.018	-0.019	-0.019	-0.044	-0.045	-0.042	-0.050	-0.051	-0.052
1.65	.962	-0.022	-0.023	-0.022	-0.018	-0.019	-0.019	-0.044	-0.045	-0.042	-0.050	-0.051	-0.052
1.08	.982	-0.022	-0.023	-0.022	-0.018	-0.019	-0.019	-0.044	-0.045	-0.042	-0.050	-0.051	-0.052
.51	.982	-0.027	-0.027	-0.027	-0.023	-0.021	-0.020	-0.049	-0.050	-0.048	-0.056	-0.055	-0.053
.23	.992	-0.135	-0.131	-0.131	-0.131	-0.129	-0.128	-0.050	-0.050	-0.052	-0.051	-0.049	-0.051
.11	.992	-0.169	-0.169	-0.166	-0.171	-0.173	-0.168	-0.115	-0.113	-0.104	-0.052	-0.062	-0.068
		$P_{t,J}/P_{\infty} = 2.72$ (max.)			$P_{t,J}/P_{\infty} = 2.99$			$P_{t,J}/P_{\infty} = 2.98$					
7.93	.722	-0.020	-0.006	0.014	-0.015	0.000	0.023	-0.154	-0.150	-0.100			
7.56	.742	-0.007	-0.001	—	-0.002	0.006	—	-0.107	-0.099	—			
6.79	.762	-0.013	-0.009	-0.001	-0.010	-0.003	0.005	-0.103	-0.096	-0.090			
5.65	.802	-0.016	-0.011	-0.009	-0.011	-0.007	0.004	-0.083	-0.081	-0.079			
4.31	.842	-0.018	-0.014	-0.017	-0.014	-0.010	0.012	-0.071	-0.068	-0.070			
3.22	.882	-0.023	-0.023	-0.023	-0.020	-0.021	0.020	-0.044	-0.043	-0.041			
2.22	.922	-0.023	-0.026	-0.028	-0.026	-0.023	0.023	-0.042	-0.043	-0.042			
1.65	.962	-0.026	-0.026	-0.026	-0.024	-0.026	0.026	-0.042	-0.043	-0.042			
1.08	.982	-0.026	-0.026	-0.026	-0.024	-0.026	0.026	-0.042	-0.043	-0.042			
.51	.982	-0.104	-0.103	-0.102	-0.103	-0.098	0.095	-0.048	-0.047	-0.042			
.23	.992	-0.142	-0.140	-0.140	-0.144	-0.141	-0.140	-0.056	-0.054	-0.057			
.11	.992	-0.180	-0.183	-0.178	-0.189	-0.189	-0.184	-0.123	-0.123	-0.113			
		$P_{t,J}/P_{\infty} = 3.79$ (max.)											
7.93	.722										-0.09	-0.095	-0.095
7.56	.742										-0.071	-0.082	-0.082
6.79	.762										-0.053	-0.061	-0.063
5.65	.802										-0.059	-0.063	-0.062
4.31	.842										-0.061	-0.067	-0.061
3.22	.882										-0.049	-0.051	-0.051
2.22	.922										-0.032	-0.048	-0.048
1.65	.962										-0.041	-0.047	-0.046
1.08	.982										-0.047	-0.059	-0.058
.51	.982										-0.023	-0.026	-0.026
.23	.992										-0.048	-0.052	-0.049
.11	.992												

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TABLE III.- AFTERBODY PRESSURE COEFFICIENTS - Continued

(a) Afterbody XIV - Continued

 $t_3 = 800^\circ F$ 

$\frac{X}{d_3}$	$\frac{X}{t_{max}}$	Pressure coefficients for -											
		$M_\infty = 0.80$			$M_\infty = 0.90$			$M_\infty = 1.00$			$M_\infty = 1.10$		
		$\theta = 0^\circ$	$\theta = 45^\circ$	$\theta = 72^\circ$	$\theta = 0^\circ$	$\theta = 45^\circ$	$\theta = 72^\circ$	$\theta = 0^\circ$	$\theta = 45^\circ$	$\theta = 72^\circ$	$\theta = 0^\circ$	$\theta = 45^\circ$	$\theta = 72^\circ$
		$P_{t,i}/P_m = 1.99$			$P_{t,i}/P_m = 2.05$			$P_{t,i}/P_m = 2.53$					
7.93	.722	-0.019	-0.006	0.015	-0.018	0.003	0.086	-0.158	-0.132	-0.101			
7.36	.742	-.007	.001	—	—	—	—	-.108	-.100	—	—	—	—
6.79	.762	-.015	-.008	-.001	-.008	-.001	.007	-.105	-.096	-.069			
5.35	.802	-.013	-.011	-.008	-.009	-.005	.000	-.093	-.081	-.078			
4.51	.842	-.016	-.013	-.013	-.011	-.007	.013	-.076	-.065	-.069			
3.37	.882	-.022	-.022	-.021	-.017	-.017	.016	-.044	-.043	-.040			
2.22	.922	-.036	-.023	-.024	-.032	-.028	.030	-.009	.012	.012			
1.69	.942	-.040	-.026	-.022	-.027	-.021	.030	.021	.026	.027			
1.16	.952	-.049	-.036	-.036	-.031	-.026	.035	.020	.018	.018			
.51	.952	-.059	-.046	-.046	-.037	-.036	.035	-.017	-.016	-.011			
.23	.952	-.103	-.118	-.118	-.119	-.119	.113	-.065	-.058	-.052			
.11	.956	-.152	-.153	-.149	-.159	-.159	.154	-.112	-.112	-.102			
		$P_{t,i}/P_m = 2.98$			$P_{t,i}/P_m = 2.99$			$P_{t,i}/P_m = 2.87$			$P_{t,i}/P_m = 2.99$		
7.93	.722	-.023	-.010	.011	-.013	.005	.003	-.153	-.130	-.100	-.068	-.059	-.029
7.36	.742	-.011	-.009	—	-.001	.005	—	-.107	-.099	—	-.050	-.051	-.043
6.79	.762	-.017	-.010	-.001	-.009	-.002	.007	-.104	-.096	-.068	-.051	-.049	-.043
5.35	.802	-.017	-.014	-.009	-.010	-.007	.002	-.083	-.082	-.077	-.053	-.052	-.050
4.51	.842	-.016	-.015	-.015	-.012	-.008	.011	-.071	-.065	-.070	-.061	-.056	-.061
3.37	.882	-.020	-.021	-.019	-.019	-.019	.018	-.056	-.053	-.053	-.051	-.046	-.053
2.22	.922	-.028	-.020	-.020	-.034	-.020	.021	-.005	.005	.004	-.032	-.049	-.049
1.69	.942	-.035	-.029	-.029	-.035	-.029	.023	-.023	.023	.024	-.045	-.048	-.049
1.16	.952	-.051	-.041	-.041	-.046	-.031	.026	-.013	.011	.011	-.042	-.049	-.049
.51	.952	-.089	-.067	-.064	-.094	-.053	.021	-.018	.018	.018	-.045	-.051	-.051
.23	.952	-.121	-.119	-.118	-.121	-.121	.119	-.029	-.027	-.027	-.031	-.038	-.038
.11	.956	-.193	-.177	-.171	-.174	-.173	.170	-.111	-.112	-.104	-.083	-.074	-.076
		$P_{t,i}/P_m = 4.00$						$P_{t,i}/P_m = 3.98$					
7.93	.722				-.013	.003	.005				-.081	-.053	-.085
7.36	.742				-.009	-.001	.006				-.058	-.048	-.041
6.79	.762				-.029	—	-.001				-.077	-.052	-.048
5.35	.802				-.018	-.009	-.011				-.059	-.053	-.060
4.51	.842				-.018	-.008	-.018				-.049	-.051	-.052
3.37	.882				-.024	-.018	-.024				-.051	-.047	-.047
2.22	.922				-.040	-.031	-.038				-.042	-.037	-.033
1.69	.942				-.067	-.064	-.061				-.038	-.031	-.039
1.16	.952				-.099	-.098	-.095				-.051	-.042	-.042
.51	.952				-.145	-.139	-.138				-.053	-.042	-.048
.23	.952				-.183	-.185	-.186				-.053	-.046	-.050
.11	.956										-.076	-.071	-.071
		$P_{t,i}/P_m = 4.57 (\text{max.})$			$P_{t,i}/P_m = 5.01$			$P_{t,i}/P_m = 4.99$			$P_{t,i}/P_m = 4.97$		
7.93	.722	-.023	-.007	.013	-.015	.003	.023	-.159	-.189	-.100	-.083	-.073	-.029
7.36	.742	-.008	-.002	—	-.001	.007	—	-.107	-.099	—	-.049	-.049	—
6.79	.762	-.015	-.008	—	-.010	-.002	.006	-.104	-.095	-.068	-.053	-.049	-.043
5.35	.802	-.015	-.013	-.007	—	-.002	.005	-.083	-.062	-.077	-.052	-.049	-.049
4.51	.842	-.016	-.011	-.016	-.015	-.010	.012	-.070	-.065	-.065	-.060	-.056	-.061
3.37	.882	-.021	-.020	-.020	—	-.020	.020	-.049	-.047	-.046	-.038	-.032	-.032
2.22	.922	-.036	-.032	-.032	-.037	-.032	.034	-.010	.013	.010	-.032	-.048	-.050
1.69	.942	-.040	-.037	-.035	-.042	-.037	.036	-.003	.027	.028	-.033	-.037	-.039
1.16	.952	-.066	-.064	-.061	-.070	-.067	.064	-.005	.018	.015	-.040	-.043	-.042
.51	.952	-.100	-.098	-.095	-.102	-.104	.101	-.018	-.017	-.015	-.042	-.048	-.049
.23	.952	-.145	-.141	-.142	-.152	-.152	.149	-.070	-.067	-.066	-.047	-.056	-.056
.11	.956	-.183	-.185	-.186	-.200	-.200	.191	-.134	-.134	-.125	-.103	-.095	-.095
		$P_{t,i}/P_m = 5.81 (\text{max.})$						$P_{t,i}/P_m = 6.75 (\text{max.})$					
7.93	.722							-.153	-.130	-.100	-.083	-.073	-.033
7.36	.742							-.107	-.099	—	-.049	-.049	—
6.79	.762							-.104	-.093	—	-.048	-.048	—
5.35	.802							-.083	-.082	-.078	-.056	-.051	-.049
4.51	.842							-.070	-.065	-.065	-.054	-.051	-.049
3.37	.882							-.064	-.063	-.063	-.054	-.051	-.049
2.22	.922							-.013	-.016	-.013	-.031	-.036	-.038
1.69	.942							.004	.027	.028	-.041	-.049	-.049
1.16	.952							-.007	.011	.014	-.047	-.040	-.036
.51	.952							-.020	-.019	-.014	-.051	-.041	-.039
.23	.952							-.074	-.071	-.064	-.058	-.049	-.049
.11	.956							-.135	-.132	-.129	-.082	-.074	-.074

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TABLE LIX.-- AFTERSHOCK PRESSURE COEFFICIENTS - Concluded

(c) Afterbody XIV - Concluded

$t_j = 1,200^{\circ} F$

$\frac{x}{l_{\max}}$	$\frac{x}{l_{\max}}$	Pressure coefficients for -											
		$M_\infty = 0.80$			$M_\infty = 0.90$			$M_\infty = 1.00$			$M_\infty = 1.10$		
		$\theta = 0^\circ$	$\theta = 45^\circ$	$\theta = 72^\circ$	$\theta = 0^\circ$	$\theta = 45^\circ$	$\theta = 72^\circ$	$\theta = 0^\circ$	$\theta = 45^\circ$	$\theta = 72^\circ$	$\theta = 0^\circ$	$\theta = 45^\circ$	$\theta = 72^\circ$
		$P_{t,j}/P_m = 2.22$ (min.)			$P_{t,j}/P_m = 2.76$ (min.)			$P_{t,j}/P_m = 2.87$ (min.)					
7.95	.722	-.018	-.002	.018	-.013	.003	.026	-.158	-.129	-.099			
7.36	.742	-.003	.005	---	.005	.009	---	-.105	-.098	---			
6.79	.762	-.012	-.006	.002	-.007	.001	.009	-.103	-.094	-.087			
5.95	.802	-.013	-.011	-.018	-.009	-.004	-.016	-.064	-.056	-.048			
4.51	.842	-.019	-.019	-.018	-.007	-.004	-.016	-.070	-.065	-.058			
3.57	.882	-.026	-.026	-.026	-.019	-.016	-.024	-.074	-.069	-.062			
2.52	.922	-.034	-.034	-.034	-.023	-.020	-.026	-.083	-.078	-.071			
1.65	.962	-.041	-.041	-.041	-.029	-.026	-.032	-.091	-.086	-.080			
1.08	.982	-.051	-.051	-.051	-.039	-.035	-.042	-.101	-.092	-.085			
.51	.982	-.086	-.086	-.086	-.069	-.065	-.076	-.103	-.092	-.086			
.23	.992	-.117	-.114	-.114	-.103	-.109	-.118	-.107	-.097	-.092			
.11	.995	-.147	-.148	-.143	-.129	-.128	-.138	-.107	-.103	-.099			
		$P_{t,j}/P_m = 2.98$			$P_{t,j}/P_m = 3.00$			$P_{t,j}/P_m = 2.95$			$P_{t,j}/P_m = 2.97$ (min.)		
7.95	.722	-.018	.004	.015	-.012	.005	.026	-.159	-.134	-.103	-.081	-.081	-.082
7.36	.742	-.002	---	---	.003	.009	---	-.109	-.101	---	-.049	-.049	---
6.79	.762	-.014	-.006	.003	-.008	.001	.011	-.102	-.095	-.089	-.032	-.032	-.031
5.95	.802	-.012	-.019	-.007	-.008	-.005	.003	-.088	-.082	-.075	-.060	-.060	-.058
4.51	.842	-.012	-.018	-.015	-.010	-.008	-.016	-.088	-.083	-.076	-.065	-.065	-.063
3.57	.882	-.019	-.019	-.019	-.015	-.012	-.024	-.094	-.088	-.081	-.071	-.071	-.067
2.52	.922	-.026	-.026	-.026	-.019	-.017	-.026	-.103	-.097	-.091	-.083	-.083	-.078
1.65	.962	-.034	-.034	-.034	-.023	-.020	-.032	-.110	-.104	-.098	-.093	-.093	-.088
1.08	.982	-.056	-.053	-.051	-.039	-.037	-.052	-.104	-.097	-.091	-.085	-.085	-.080
.51	.982	-.082	-.082	-.081	-.066	-.065	-.076	-.119	-.113	-.107	-.101	-.101	-.098
.23	.992	-.114	-.113	-.112	-.103	-.102	-.118	-.118	-.106	-.103	-.097	-.093	-.090
.11	.995	-.146	-.148	-.145	-.133	-.133	-.149	-.118	-.113	-.103	-.097	-.093	-.090
		$P_{t,j}/P_m = 3.98$											
7.95	.722										-.063	-.059	-.058
7.36	.742										-.061	-.061	---
6.79	.762										-.058	-.058	---
5.95	.802										-.053	-.053	-.050
4.51	.842										-.049	-.049	-.048
3.57	.882										-.045	-.045	-.043
2.52	.922										-.042	-.042	-.040
1.65	.962										-.037	-.037	-.035
1.08	.982										-.033	-.033	-.032
.51	.982										-.028	-.028	-.028
.23	.992										-.023	-.023	-.022
.11	.995										-.019	-.018	-.018
		$P_{t,j}/P_m = 5.01$			$P_{t,j}/P_m = 4.97$			$P_{t,j}/P_m = 4.99$			$P_{t,j}/P_m = 4.97$		
7.95	.722	-.017	-.005	.017	-.010	.005	.028	-.153	-.129	-.100	-.062	-.062	-.062
7.36	.742	-.006	.002	---	.003	.009	.023	-.106	-.098	---	-.055	-.055	---
6.79	.762	-.012	-.003	.004	-.005	.003	.011	-.103	-.094	-.087	-.050	-.050	-.049
5.95	.802	-.012	-.008	.005	-.007	.003	.007	-.076	-.070	-.064	-.047	-.047	-.046
4.51	.842	-.012	-.007	.005	-.009	.002	.007	-.073	-.067	-.062	-.045	-.045	-.044
3.57	.882	-.017	-.015	.015	-.010	.012	.014	-.068	-.062	-.057	-.040	-.040	-.039
2.52	.922	-.020	-.018	.018	-.015	.012	.016	-.065	-.060	-.055	-.038	-.038	-.037
1.65	.962	-.027	-.024	.024	-.020	.018	.024	-.062	-.057	-.052	-.035	-.035	-.034
1.08	.982	-.030	-.028	.028	-.025	.022	.026	-.059	-.054	-.050	-.033	-.033	-.032
.51	.982	-.034	-.032	.032	-.028	.025	.032	-.056	-.051	-.047	-.030	-.030	-.029
.23	.992	-.037	-.035	.035	-.032	.028	.035	-.053	-.048	-.044	-.027	-.027	-.026
.11	.995	-.043	-.041	.041	-.037	.033	.040	-.050	-.045	-.041	-.024	-.024	-.023
		$P_{t,j}/P_m = 5.73$ (max.)			$P_{t,j}/P_m = 6.31$ (max.)			$P_{t,j}/P_m = 6.99$			$P_{t,j}/P_m = 6.99$		
7.95	.722	-.019	-.009	.024	-.012	.002	.023	-.153	-.130	-.101	-.063	-.063	-.063
7.36	.742	-.007	-.001	---	.000	.009	---	-.106	-.099	---	-.050	-.050	---
6.79	.762	-.014	-.007	.008	-.007	.001	.019	-.103	-.094	-.087	-.052	-.052	-.051
5.95	.802	-.013	-.011	.006	-.007	.004	.001	-.081	-.071	-.064	-.046	-.046	-.045
4.51	.842	-.013	-.010	.013	-.008	.005	.009	-.073	-.064	-.056	-.038	-.038	-.037
3.57	.882	-.019	-.018	.017	-.014	.012	.015	-.068	-.060	-.052	-.035	-.035	-.034
2.52	.922	-.024	-.022	.022	-.019	.017	.020	-.065	-.057	-.049	-.032	-.032	-.031
1.65	.962	-.030	-.028	.028	-.025	.023	.028	-.062	-.054	-.046	-.030	-.030	-.029
1.08	.982	-.037	-.034	.034	-.032	.029	.035	-.059	-.051	-.043	-.027	-.027	-.026
.51	.982	-.041	-.039	.039	-.036	.033	.038	-.056	-.048	-.040	-.027	-.027	-.026
.23	.992	-.045	-.043	.043	-.041	.038	.043	-.053	-.045	-.037	-.027	-.027	-.026
.11	.995	-.048	-.046	.046	-.044	.041	.046	-.050	-.042	-.034	-.027	-.027	-.026

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TABLE IV.- FOREBODY PRESSURE COEFFICIENTS

[No jet flow]

$\frac{x}{L}$	$\frac{x}{l_{max}}$	Pressure coefficients for -												
		M <sub>∞</sub> = 0.80			M <sub>∞</sub> = 0.90			M <sub>∞</sub> = 1.00			M <sub>∞</sub> = 1.10			
		$\theta = 0^\circ$	$\theta = 45^\circ$	$\theta = 72^\circ$	$\theta = 0^\circ$	$\theta = 45^\circ$	$\theta = 72^\circ$	$\theta = 0^\circ$	$\theta = 45^\circ$	$\theta = 72^\circ$	$\theta = 0^\circ$	$\theta = 45^\circ$	$\theta = 72^\circ$	
Afterbody 1														
40.95	0.062	0.120	0.119	0.117	0.137	0.136	0.131	0.170	0.166	0.165	0.180	0.177	0.185	
35.56	.058	.065	.069	.064	.072	.072	.072	.090	.095	.095	.115	.124	.118	
35.56	.155	.153	.156	.155	.155	.155	.155	.160	.165	.165	.185	.195	.189	
35.73	.211	.203	.206	.203	.206	.206	.206	.210	.200	.200	.215	.225	.214	
35.73	.268	.266	.268	.265	.268	.268	.268	.277	.279	.279	.295	.305	.294	
28.90	.324	.068	.068	.065	.068	.068	.068	.069	.063	.063	.062	.061	.060	
26.46	.361	.018	.033	.057	.035	.051	.074	.095	.109	.109	.151	.148	.147	
24.05	.458	.006	.014	.021	.023	.018	.012	.105	.101	.101	.097	.128	.119	
21.63	.494	.059	.114	.159	.079	.105	.137	.095	.080	.080	.064	.061	.062	
20.01	.532	.137	.188	.239	.163	.215	.265	.073	.126	.126	.178	.066	.065	
18.58	.570	.122	.161	.199	.106	.260	.333	.114	.201	.201	.235	.034	.073	.132
16.04	.606	.090	.108	.125	.110	.160	.175	.188	.227	.261	.058	.085	.111	
15.22	.644	.097	.043	.004	.064	.046	.008	.228	.215	.199	.102	.106	.034	
15.64	.681	.025	.019	.005	.033	.015	.009	.157	.131	.099	.085	.094	.021	
12.69	.708	.031	.080	.001	.028	.015	.005	.113	.059	.085	.047	.032	.019	
Afterbody 6														
27.27	.084	.115	.112	.118	.131	.130	.136	.157	.159	.168	.179	.178	.186	
25.56	.104	.067	.059	.062	.075	.070	.073	.099	.095	.096	.116	.120	.124	
25.56	.154	.005	.003	.007	.011	.005	.010	.014	.009	.016	.044	.060	.062	
25.85	.204	.005	.003	.001	.007	.004	.002	.015	.001	.010	.035	.038	.028	
22.15	.226	.005	.003	.001	.007	.004	.005	.017	.019	.016	.021	.026	.023	
20.44	.264	.005	.003	.001	.007	.004	.005	.017	.019	.016	.021	.026	.023	
18.73	.314	.011	.010	.006	.008	.005	.003	.023	.015	.016	.026	.026	.018	
17.00	.364	.069	.031	.053	.054	.054	.072	.098	.108	.135	.104	.095	.098	
15.29	.414	.008	.013	.018	.023	.022	.018	.105	.104	.108	.132	.123	.113	
15.16	.454	.059	.119	.159	.076	.105	.132	.095	.109	.109	.159	.095	.099	
12.44	.504	.136	.188	.239	.159	.218	.265	.070	.180	.171	.002	.063	.065	
11.30	.564	.118	.158	.199	.103	.265	.330	.113	.201	.201	.238	.035	.072	.129
10.21	.642	.091	.107	.139	.130	.150	.160	.168	.225	.260	.053	.085	.114	
9.07	.682	.055	.042	.002	.058	.043	.001	.223	.212	.134	.101	.103	.030	

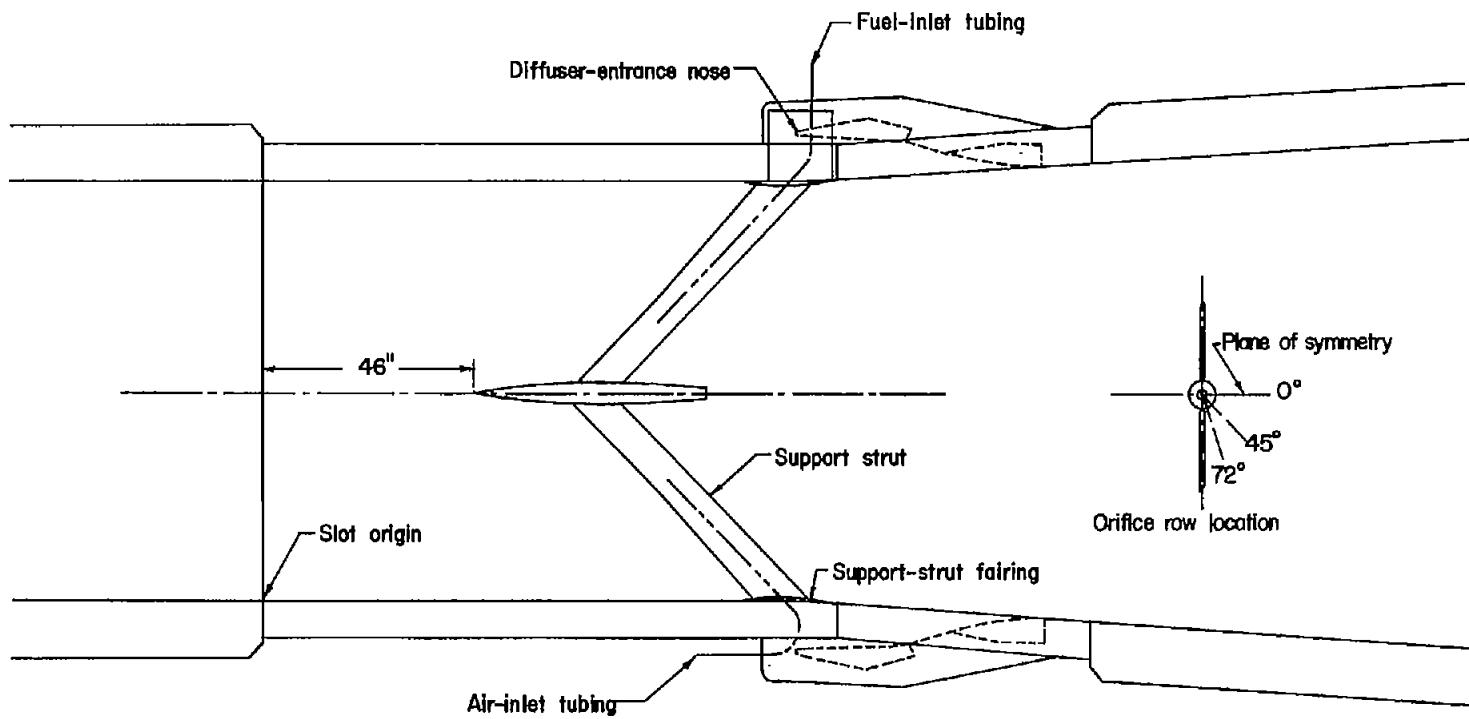
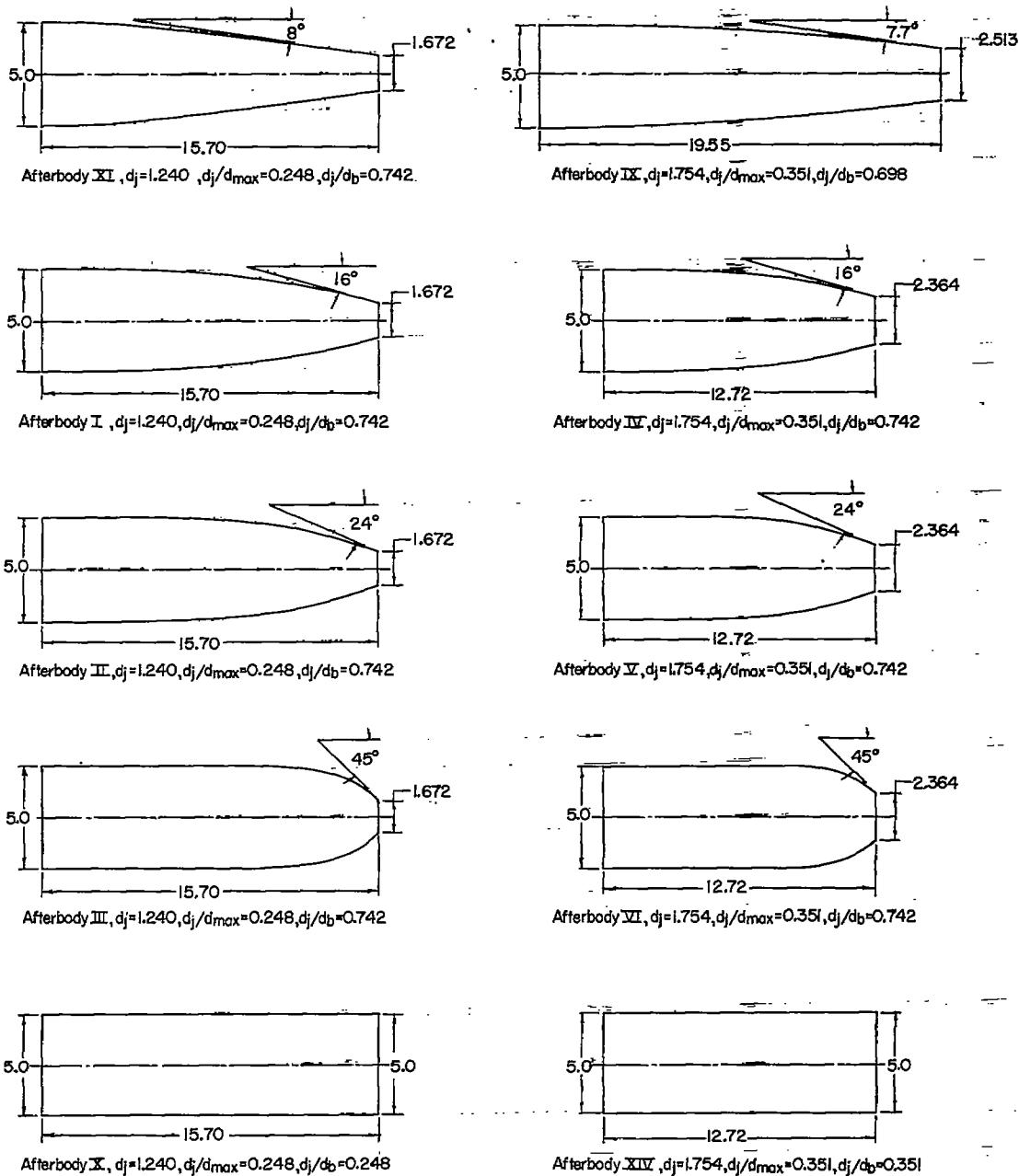
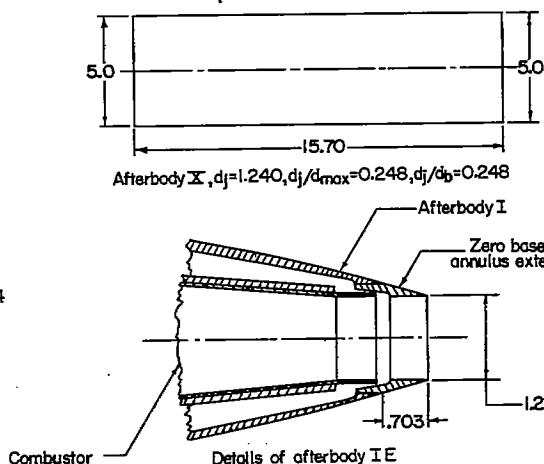
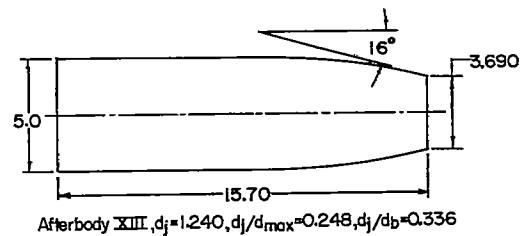
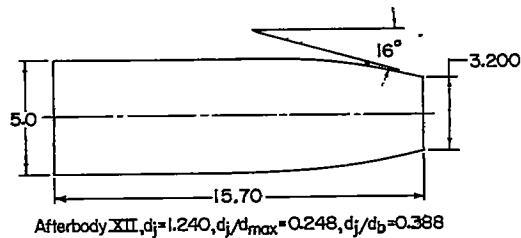
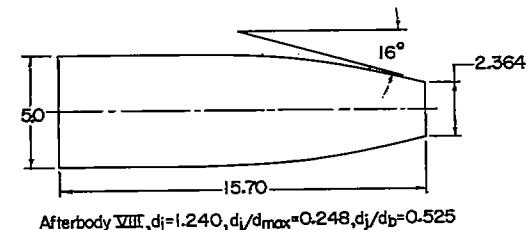
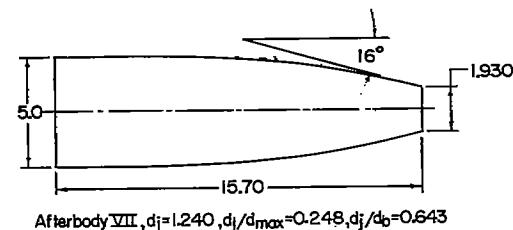
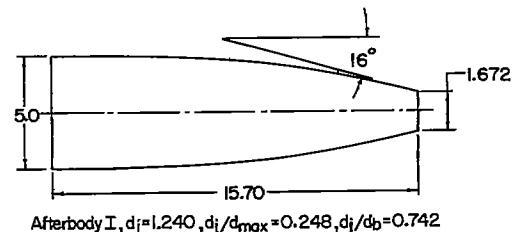
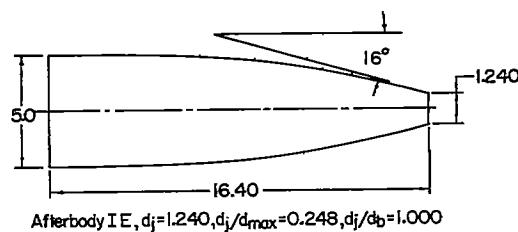


Figure 1.- Turbojet-simulator model in Langley 8-foot transonic tunnel.



(a) Shapes used to study the effects of  $\beta$  and  $d_j/d_{max}$ .

Figure 2.- Drawing of afterbody shapes investigated. All dimensions are in inches unless otherwise noted.



(b) Shapes used to study the effects of  $d_j/d_b$ .

Figure 2.- Concluded.

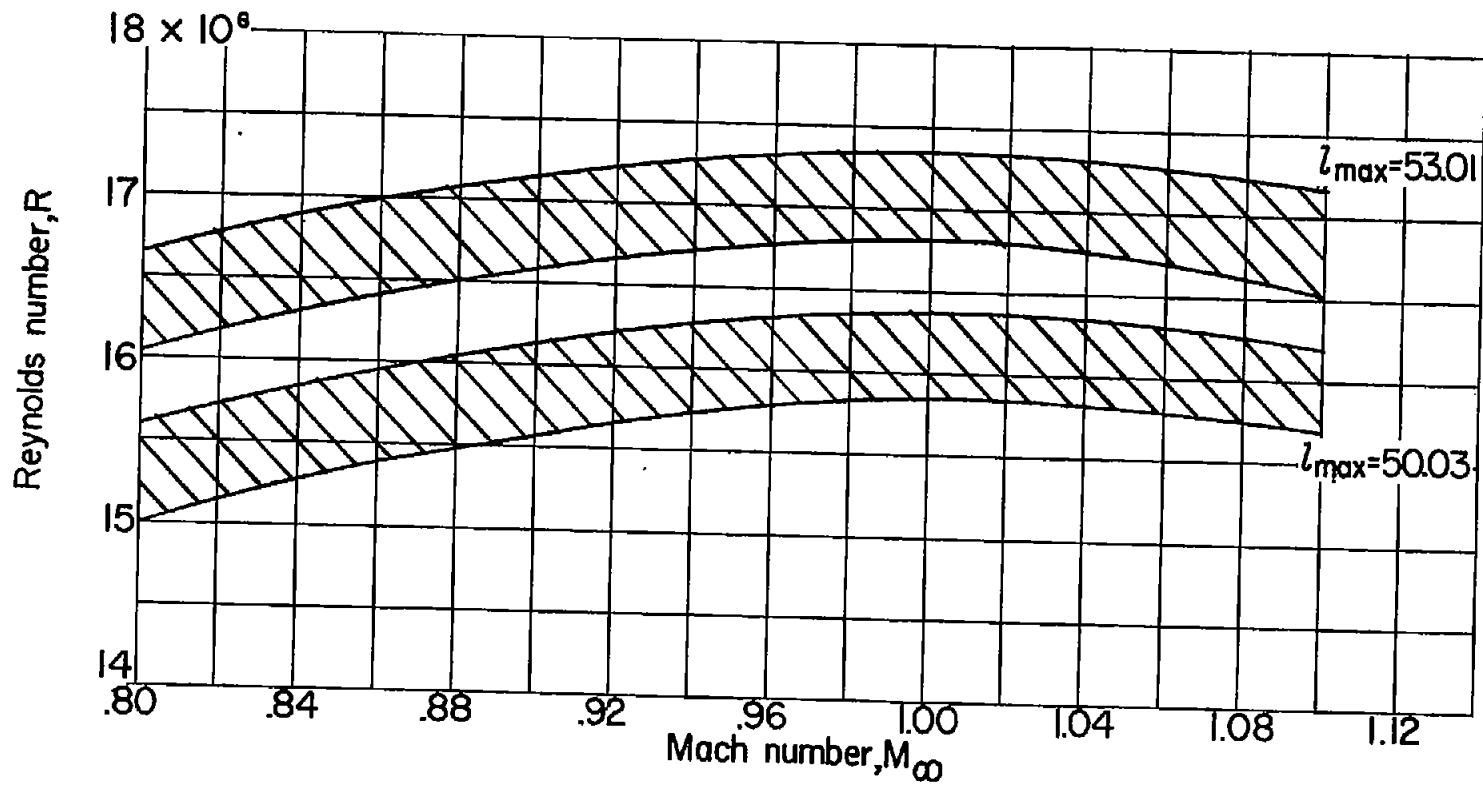
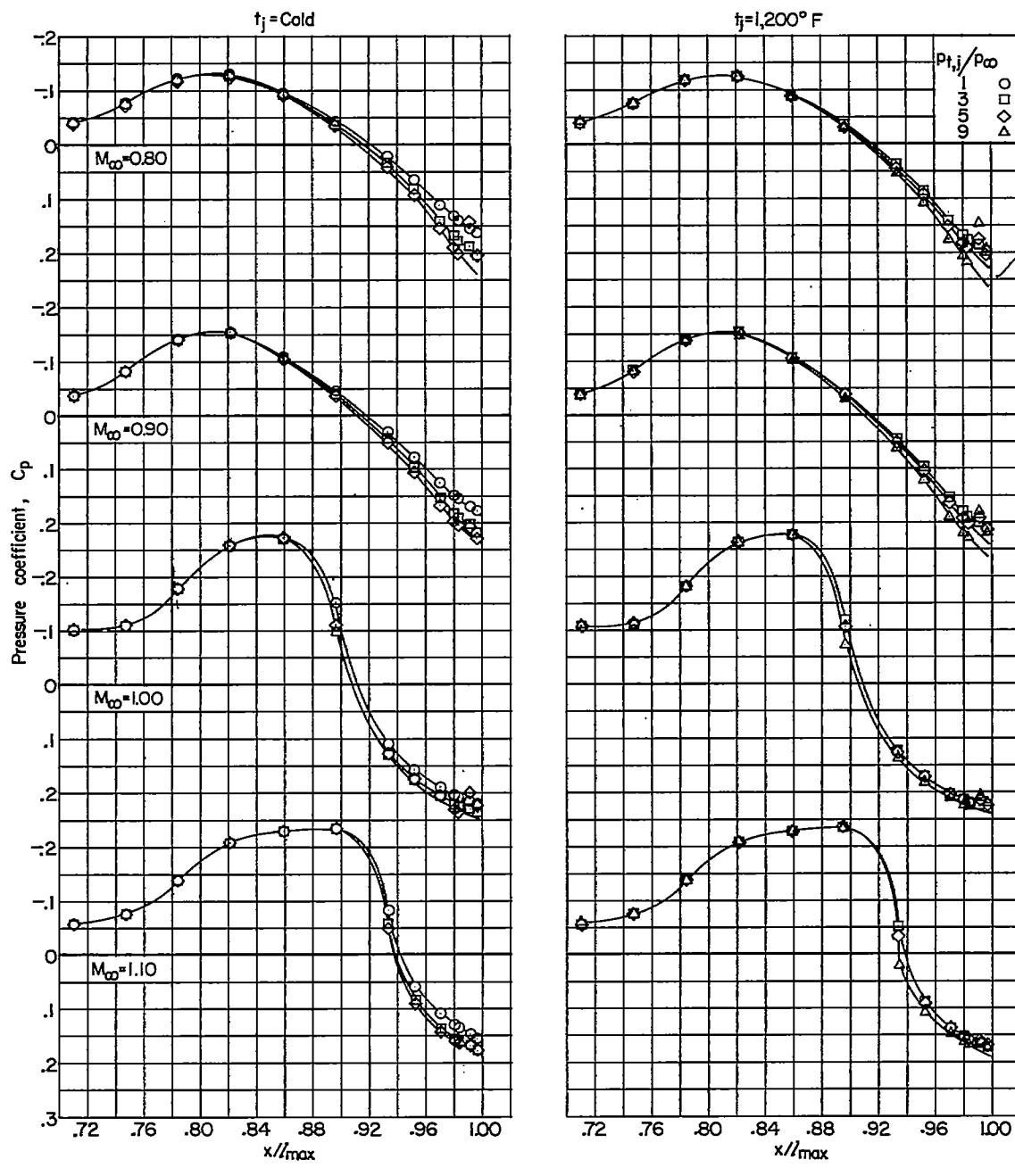
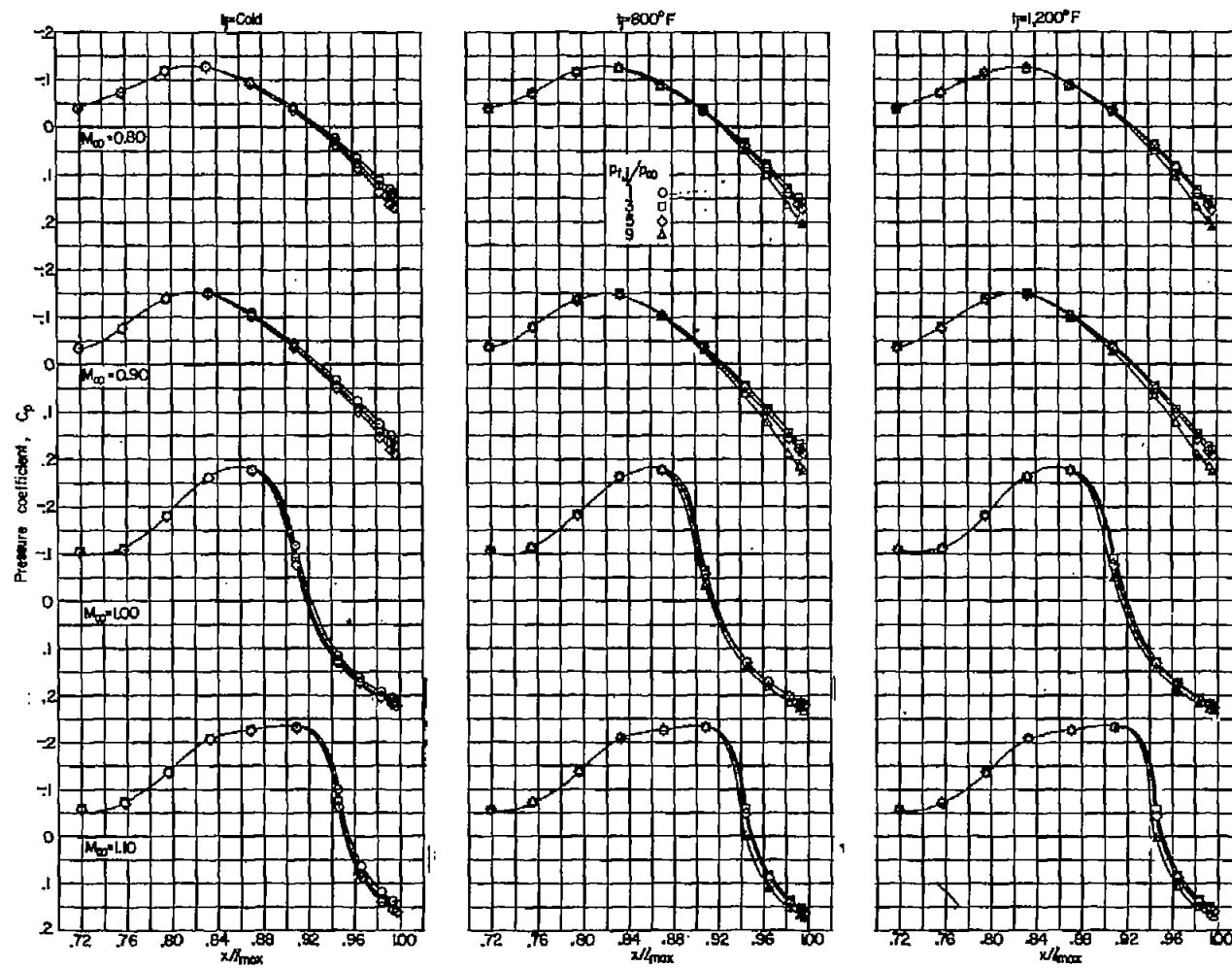


Figure 3.- Variation of Reynolds number, based on body length, with Mach number.



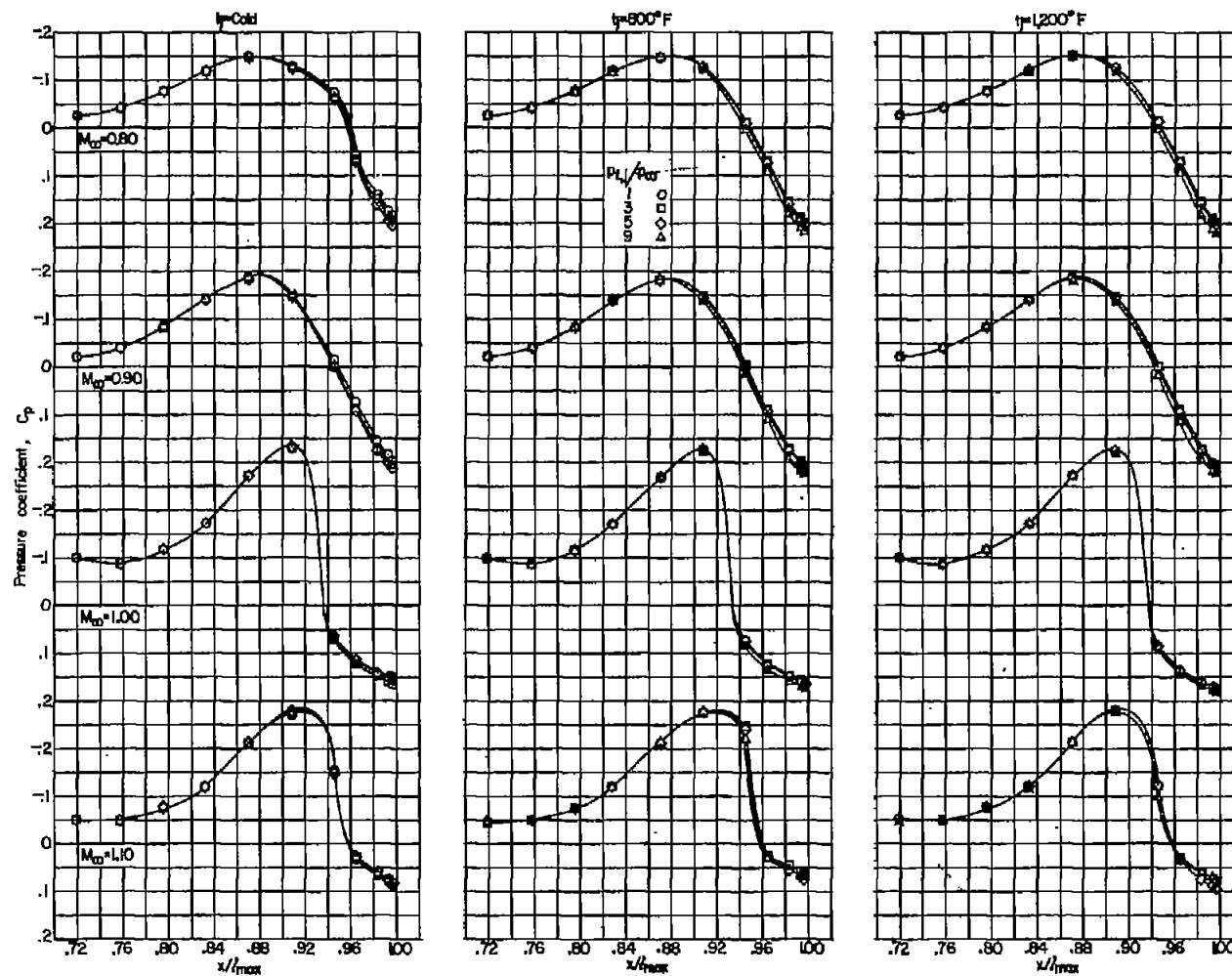
(a) Afterbody II.

Figure 4.- Variation of local-pressure coefficients along the 0° meridian for the afterbodies investigated.



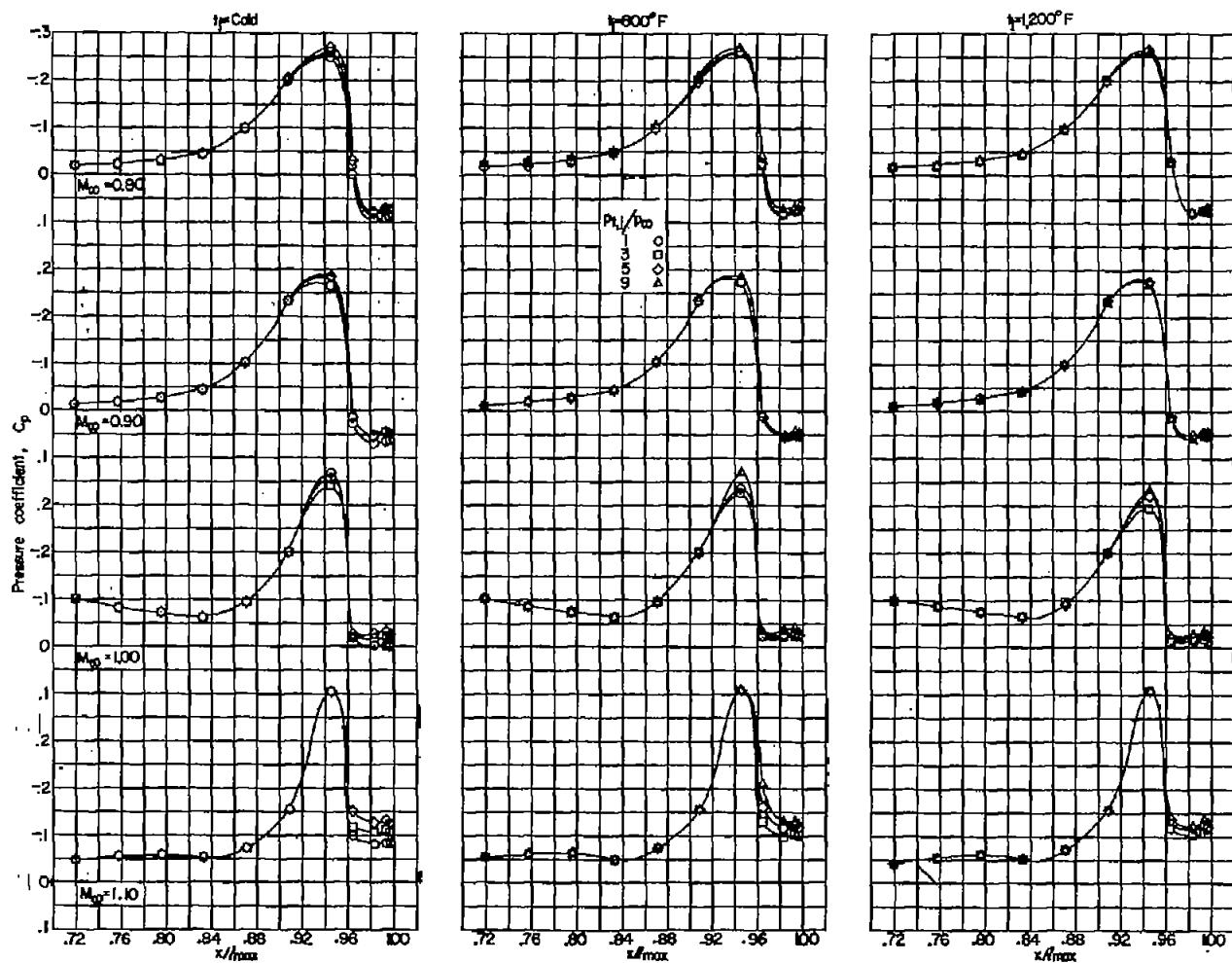
(b) Afterbody I.

Figure 4.- Continued.

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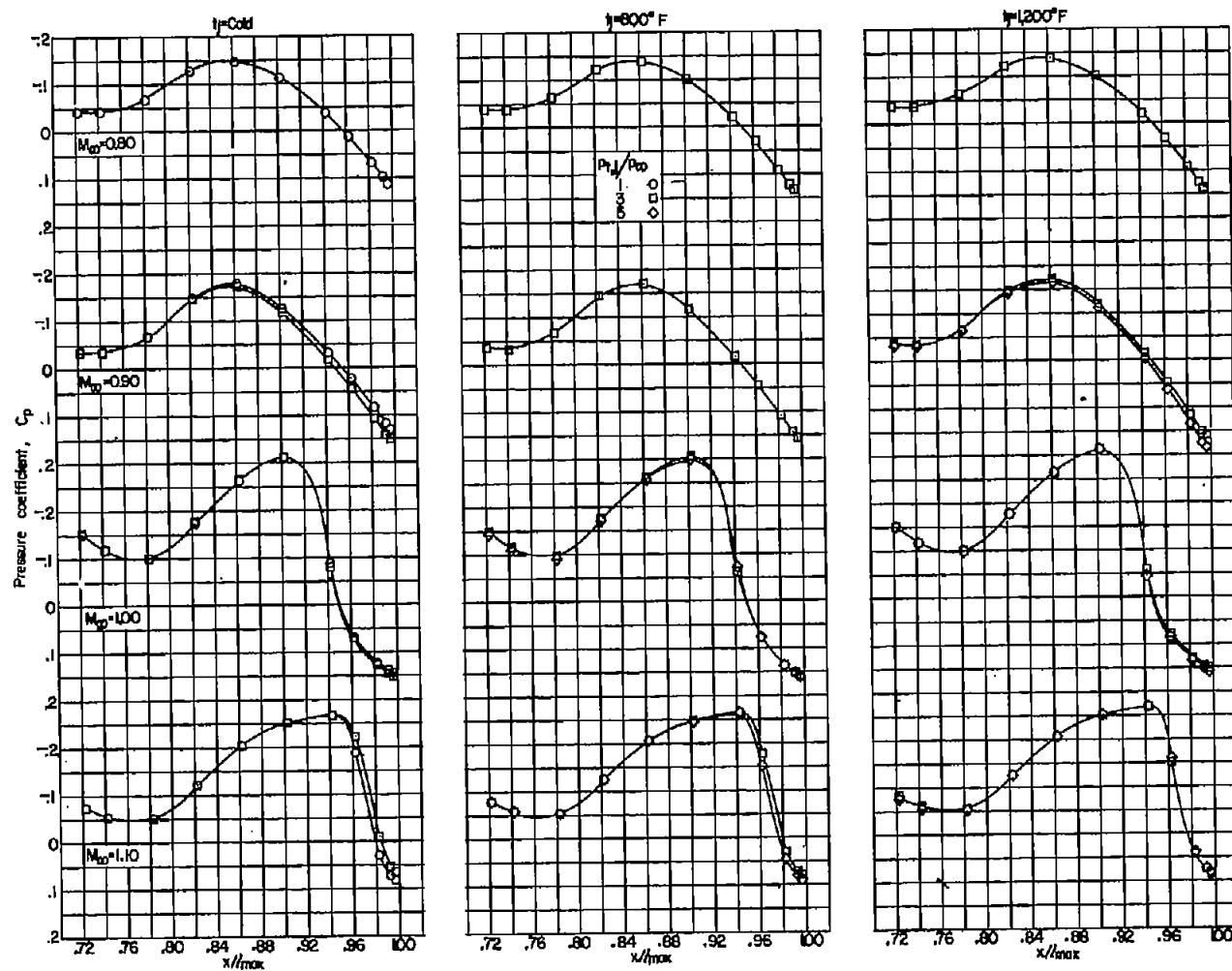
(c) Afterbody II.

Figure 4.- Continued.



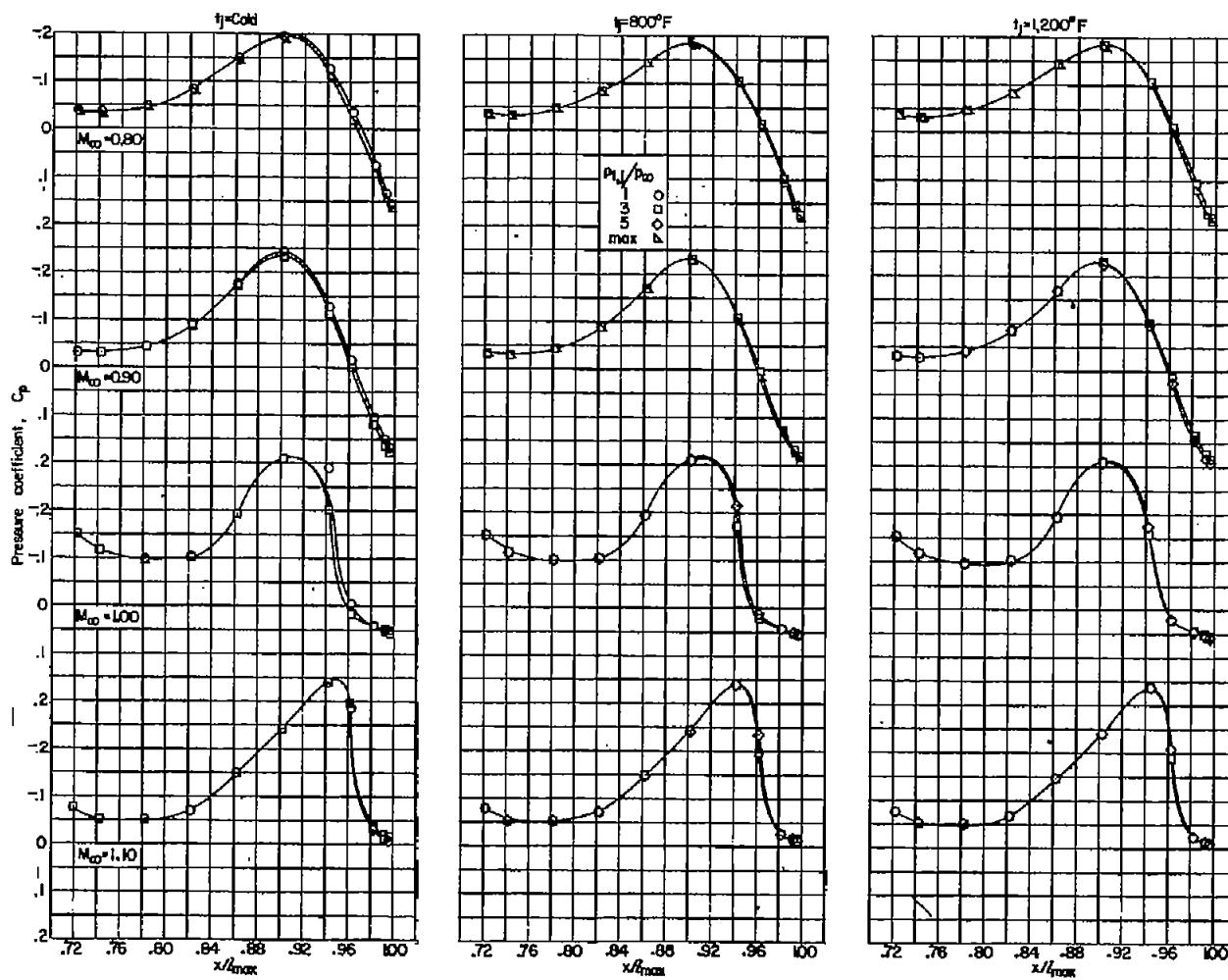
(d) Afterbody III.

Figure 4.- Continued.



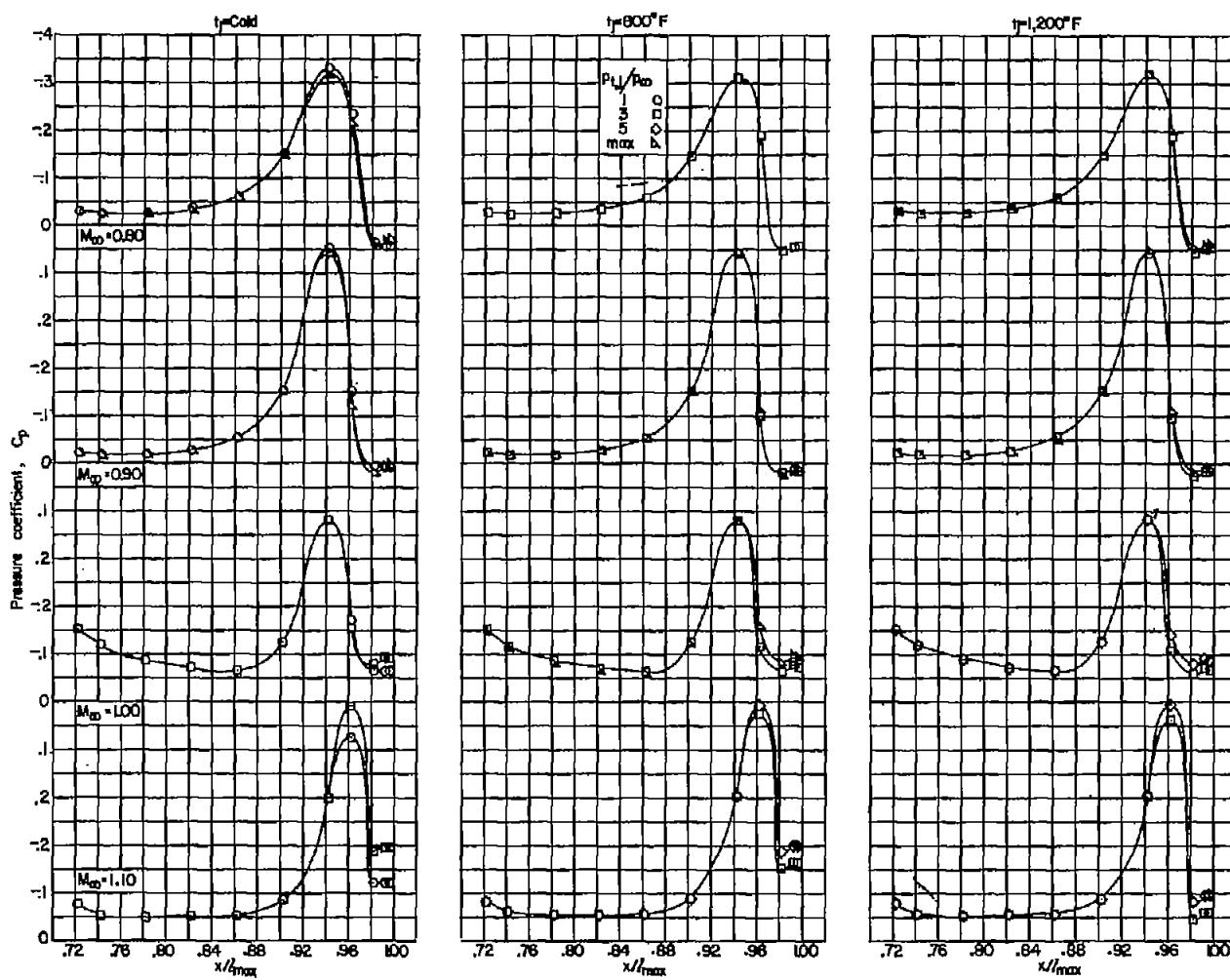
(e) Afterbody IV.

Figure 4.- Continued.



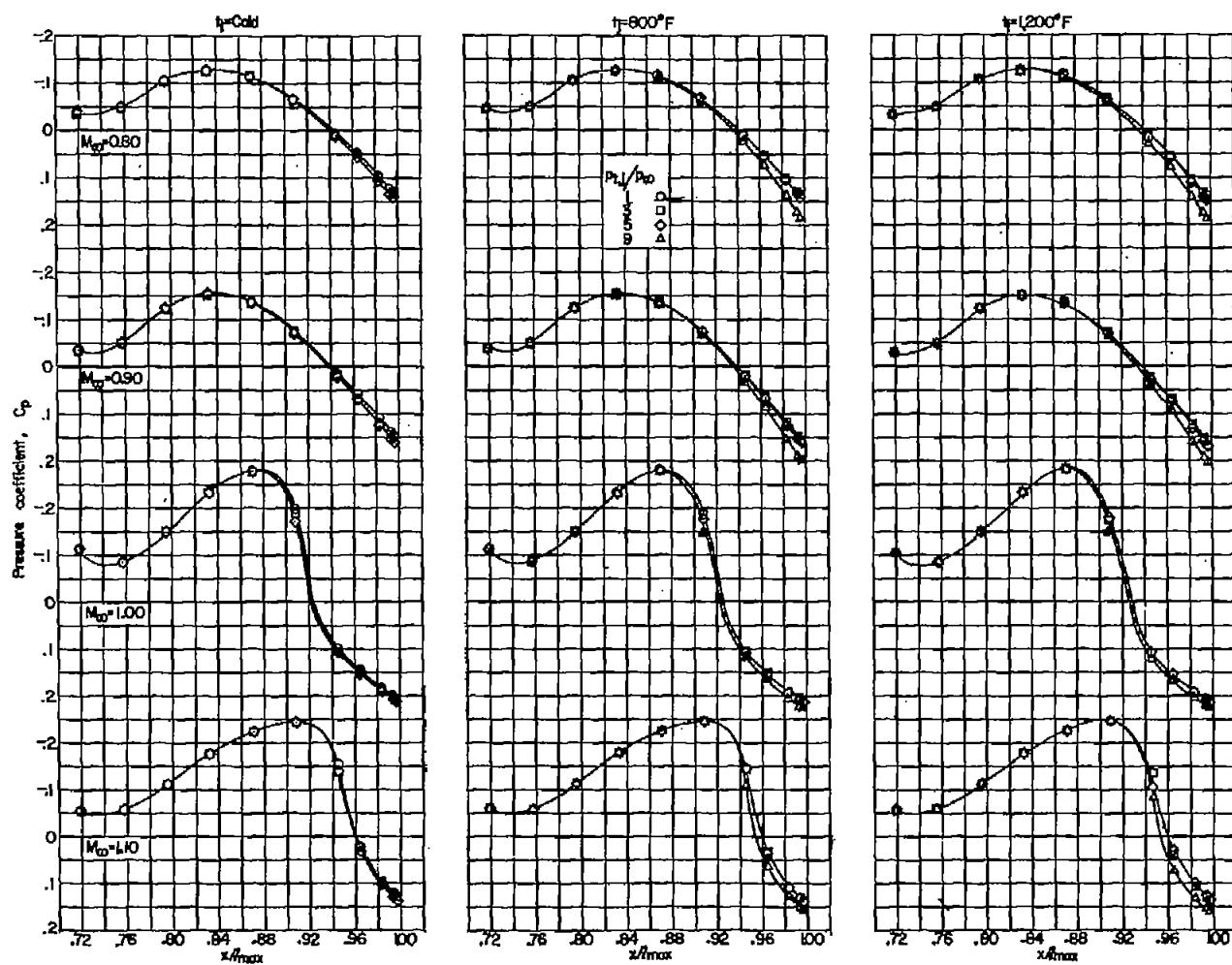
(f) Afterbody V.

Figure 4.- Continued.



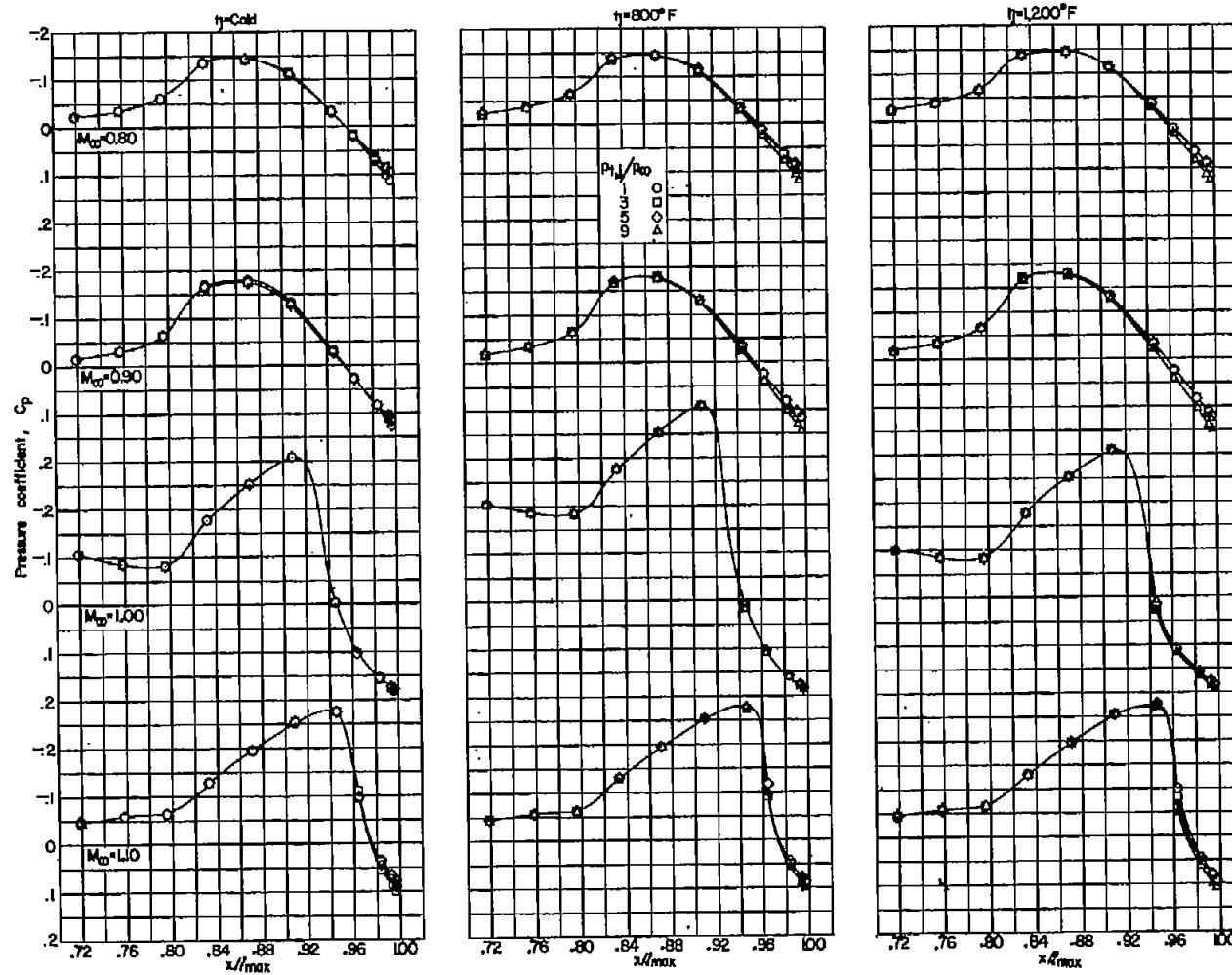
(g) Afterbody VI.

Figure 4.- Continued.



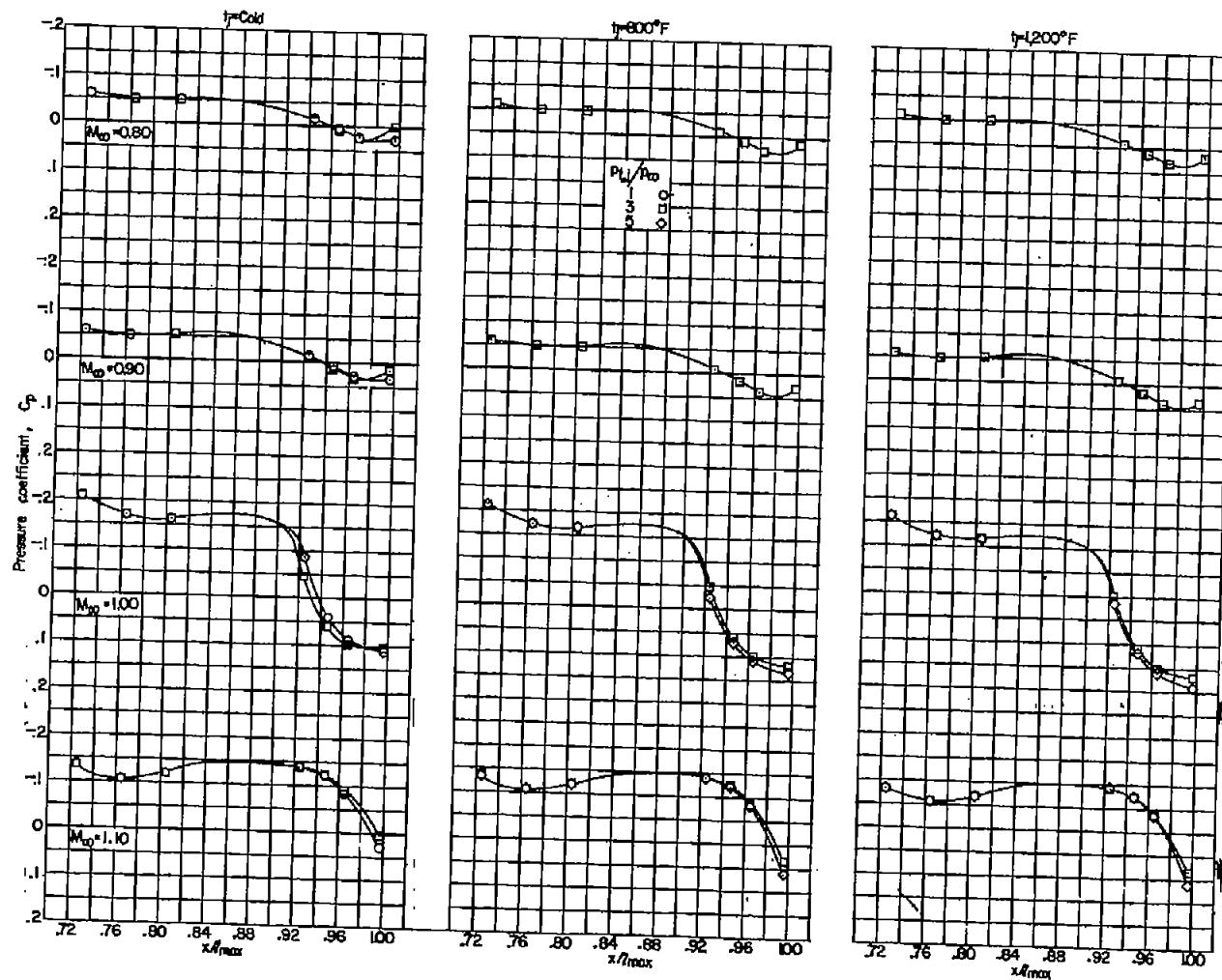
(h) Afterbody VII.

Figure 4.- Continued.



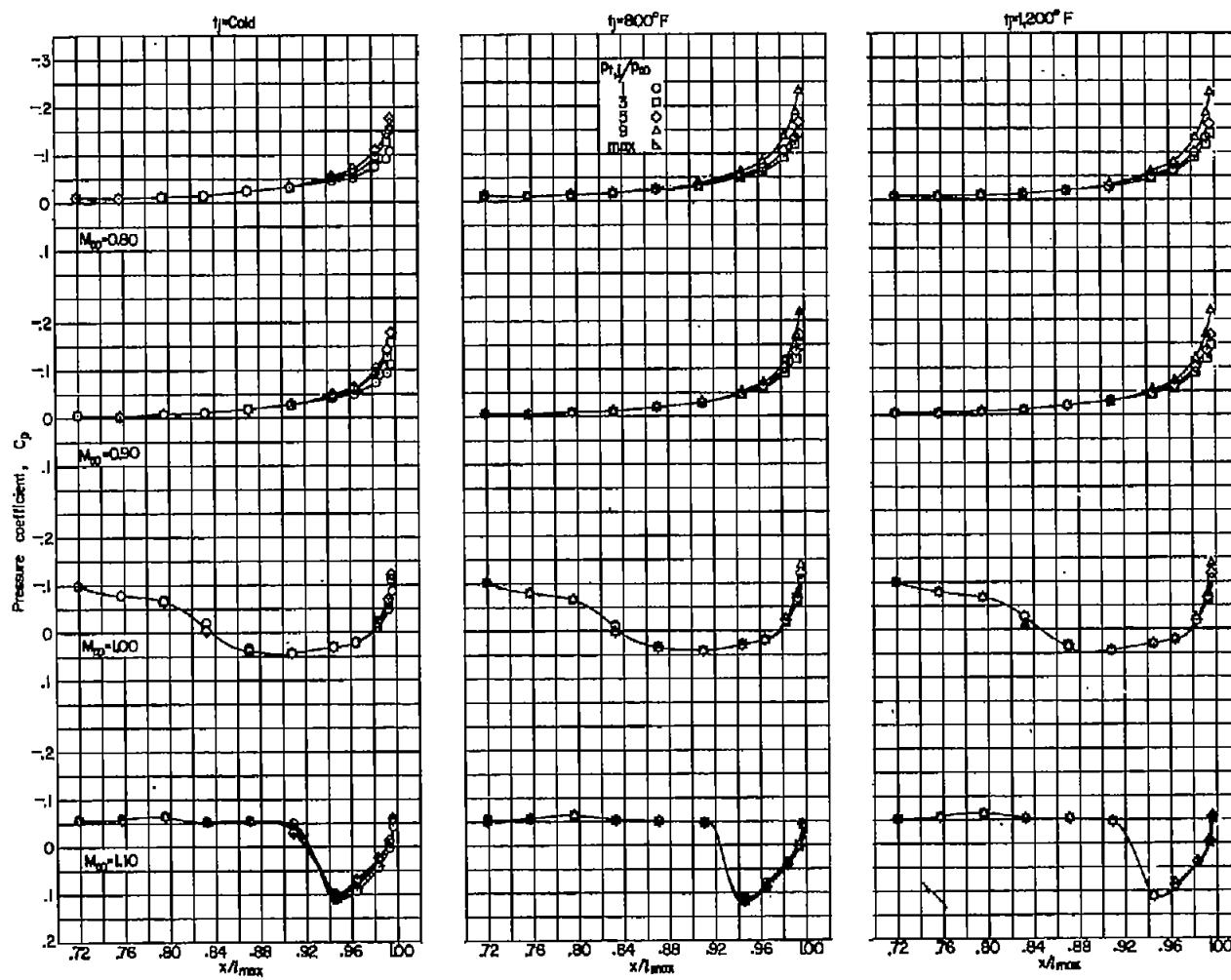
(i) Afterbody VIII.

Figure 4.- Continued.



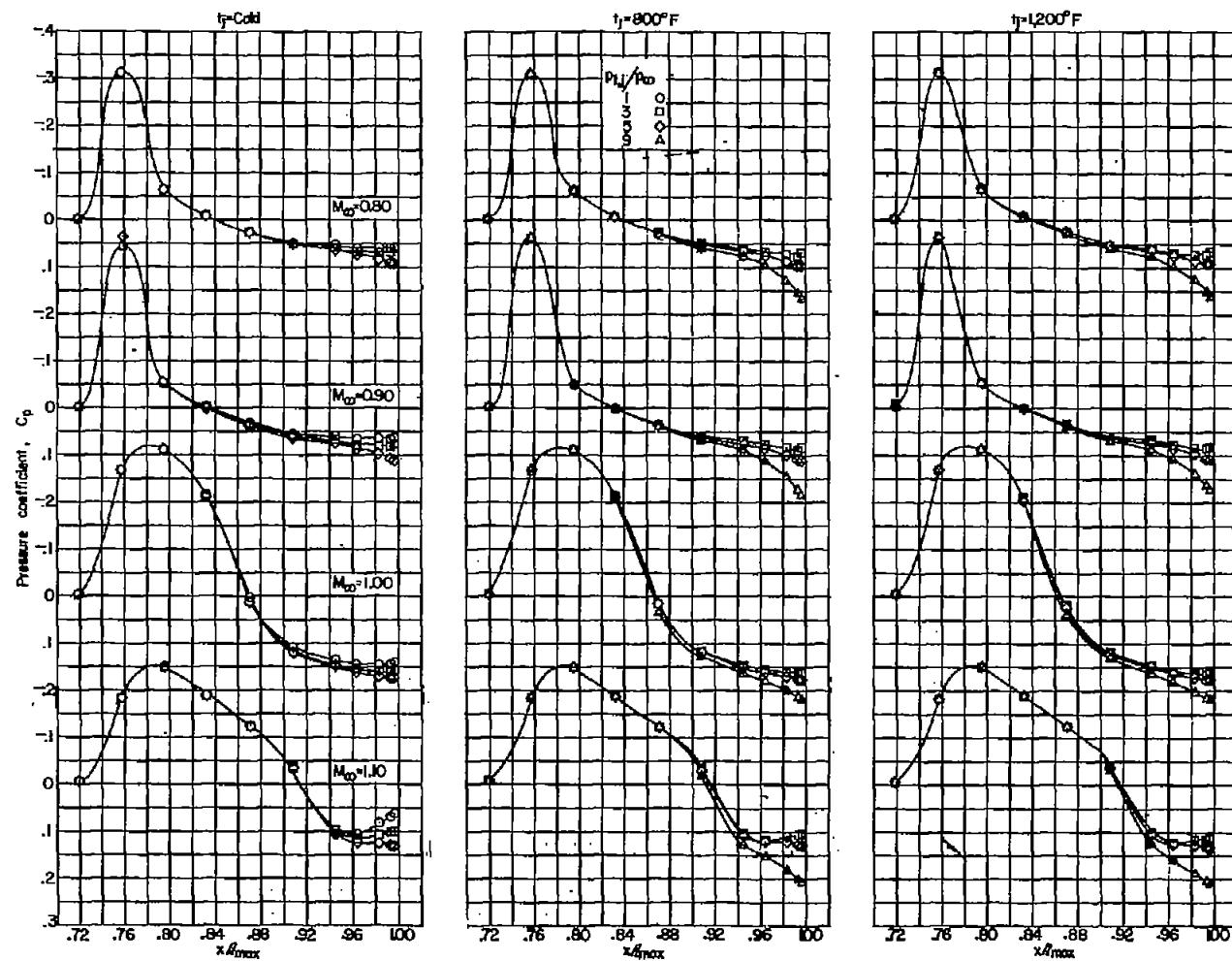
(j) Afterbody IX.

Figure 4.- Continued.



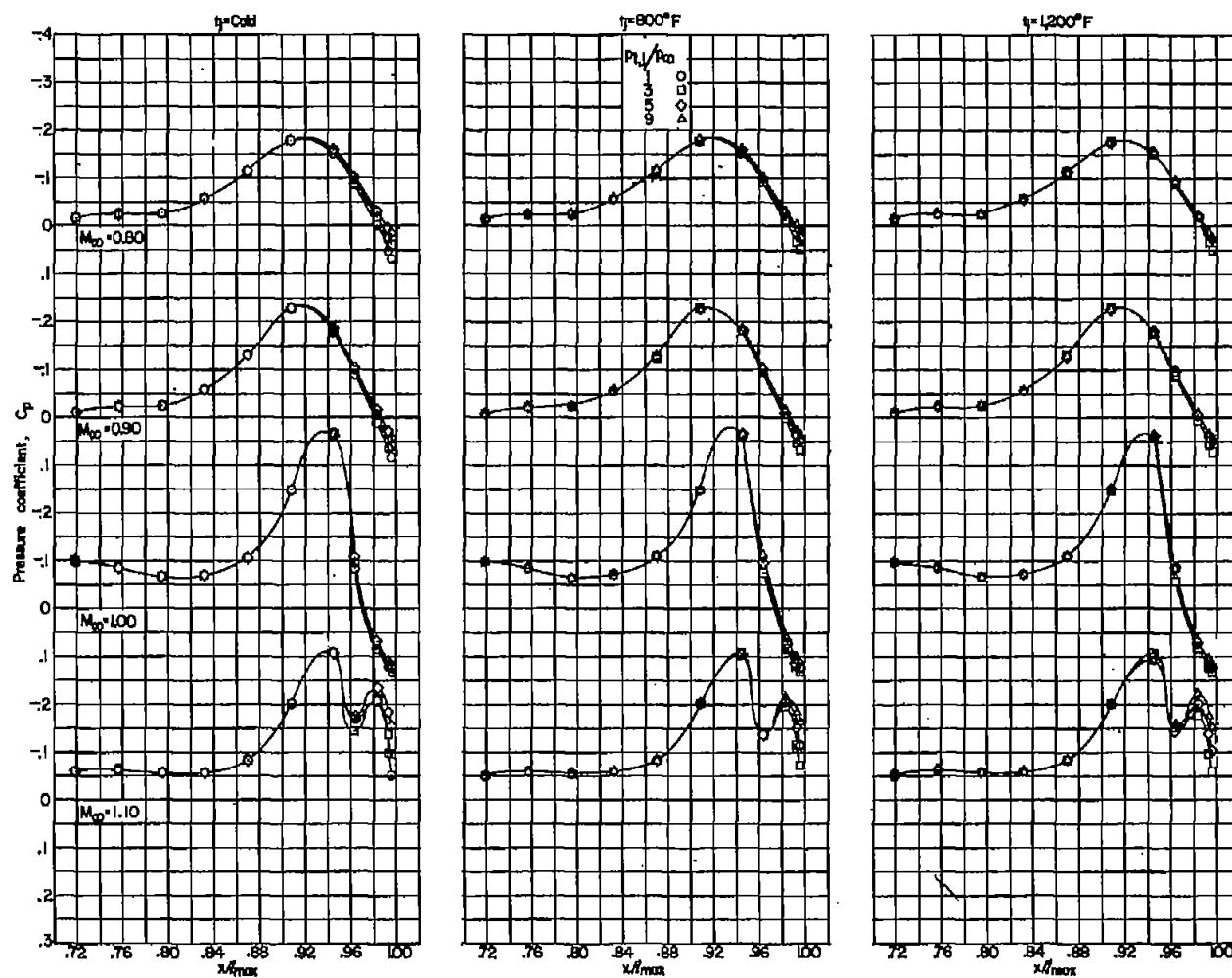
(k) Afterbody X.

Figure 4.- Continued.



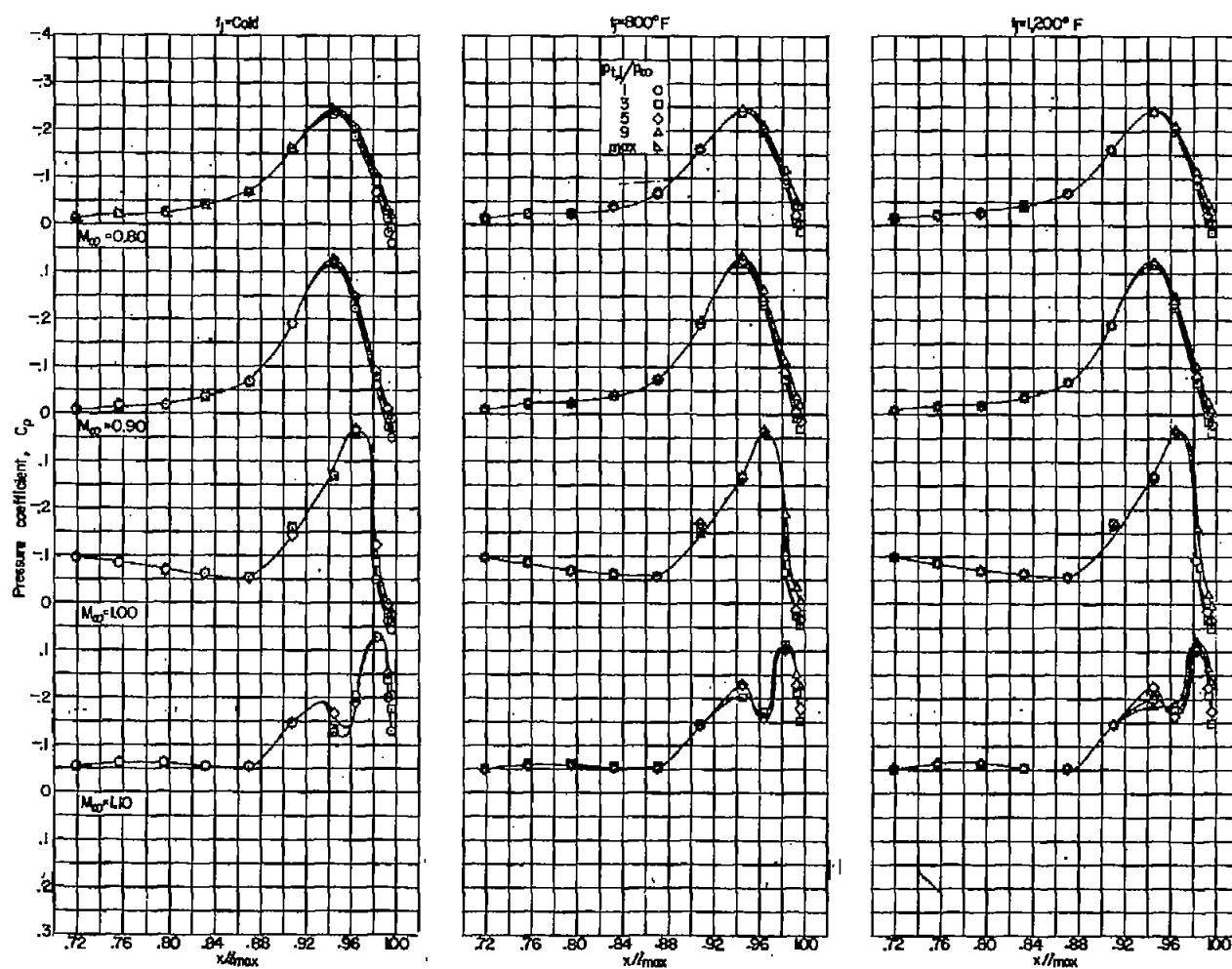
(l) Afterbody XI.

Figure 4.- Continued.



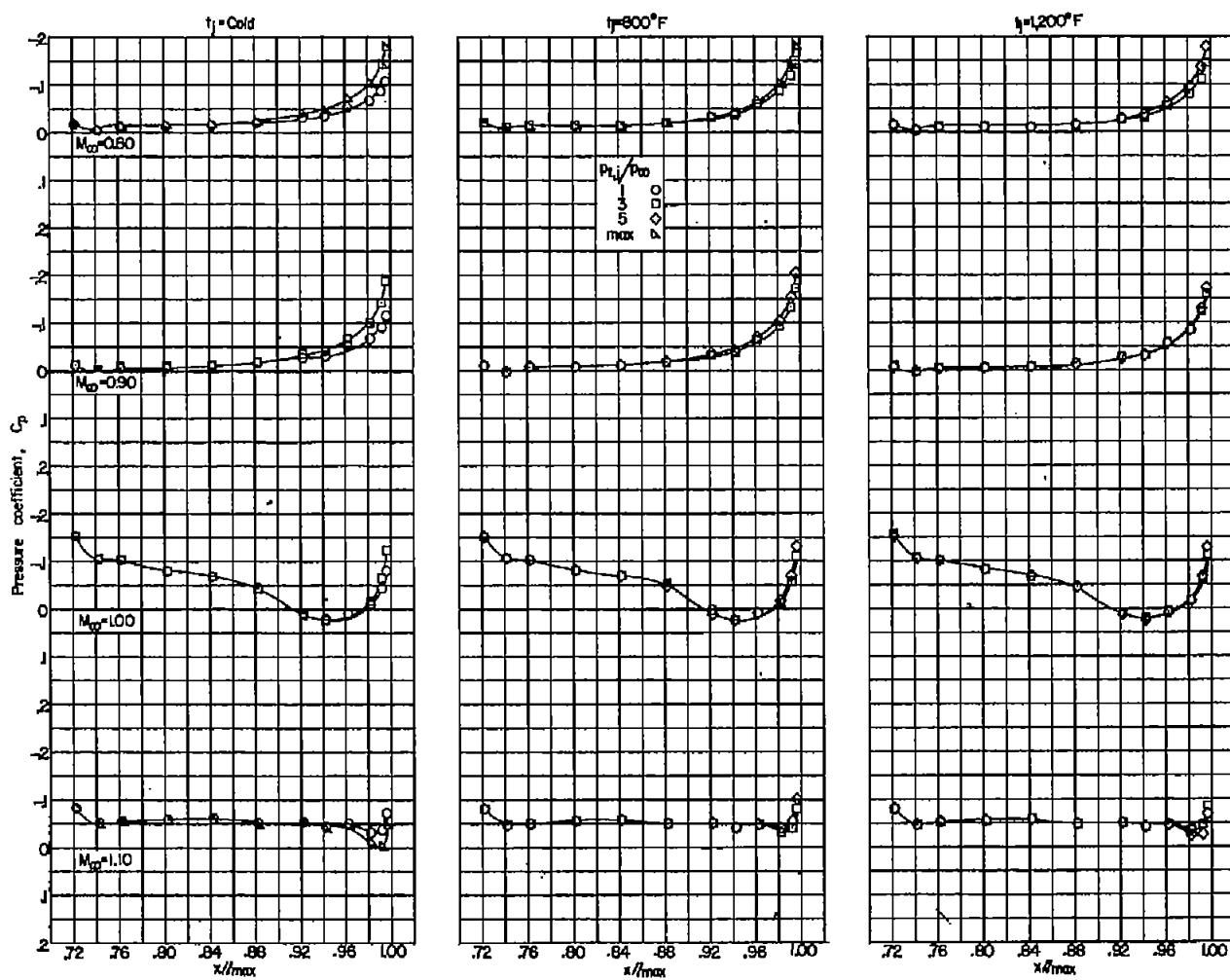
(m) Afterbody XII.

Figure 4.- Continued.



(n) Afterbody XIII.

Figure 4.- Continued.



(o) Afterbody XIV.

Figure 4.- Concluded.